

Break

"We've got a raven and a kestrel in the freezer", volunteers Mrs Sara Steel cheerfully and goes on to describe the inconvenience of tugging a decomposing 500 pound seal, spoils of a Welsh holiday, all the way to Sussex by trailer. Her son Richard is quick to acknowledge that his mother's benevolent attitude to his hobby has played an important part in his success as author of *Skulls*, yesterday declared winner of this year's TES senior Information Book Award.

Richard, now 18, began collecting animal and bird skulls at the age of seven and learned, by trial and error, to clean and catalogue them. As a primary school teacher, Mrs Steel knew the benefits of developing a child's interests and calmly said "lovely dear" as bodies decomposed within smelling range of the back door.

Later, when Richard was at the local comprehensive in Lewes, he wrote a project on skulls as part of his CSE course work. He is, he says, still angry that it was first declared unoriginal work and then, after remonstrations from his parents, "inadequate" for a Grade I pass. Never a natural academic, he was spurred on to pass O level biology.

His mother determined that he should write his findings down in book form and together they worked at it for the best part of a year. Richard sometimes chafing away while his mother wrote feverishly. The result is fresh, direct but scientifically accurate. What Richard did not know - Latin terms, for example - they took care to look up in reference books or consulted Sara Steel's old college tutor about.

Richard Steel is a quiet young man, not unduly excited by the publicity he has attracted. After school



How Richard Steel and his skulls found success

he spent a year on a pig farm (where he kept a full diary and attempted, without the required results, to breathe up the nostrils of a boar called Bill in the Woodhouse manner) but left there for something "more modern" - a slaughterhouse. He has not told his workmates about *Skulls* but he has plenty of macabre stories to tell about them and his work.

The skull collection is certainly impressive - from the slow-worm (approximately one centimetre long) to the cow. It adorns his room, where the pop group Blondie, rather reassuringly, figures too. He proudly

shows how neatly jaws fit together, and that the badger is the only animal with an articulated jaw.

In the garden two ferrets pace their cages. Their function is to keep rats away from the bone pit where a couple of goats' heads are rotting and to flush out rabbits on hunting expeditions.

Richard has something of a following. Bodies get posted through the letter box and brought in to Mrs Steel at school. And since the publication of *Skulls* last year there have been letters from a variety of enthusiasts, aged eight upwards.

Personal column

Mary Warnock

Beyond the vernacular

During university terms, I have to listen to a large number of sermons given by a variety of people, some clerical, some lay. All in all, I suppose I hear about 30 sermons in an average year. Of these, I should say that two or three may be interesting, stimulating and enjoyable; another two or three well-presented and not such as to cause actual embarrassment. The rest are terrible.

There is a kind of terribleness peculiar to the clergy, definitely and exquisitely satirized in *Beyond the Fringe*, all those years ago. "As I was on my way here, I met a man who said to me 'Hi, Jack, where are you going?' I was glad that he said that. 'Some of us think that life is rather like a sardine tin. We are always looking for the key'." And so on.

It is a different, though related, kind of awfulness that I notice in Oxford sermons. The *Beyond the Fringe* kind of sermon assumes that the congregation can understand and will recognize only the extremely simple and everyday. Adopting the stylistic techniques of *Listen with Mother* on an off day, it equally insults the hearers' intelligence and demonstrates the utter poverty of imagination. My most hated sermons on the other hand, have another characteristic as well. It is not so much the thoughts as the language itself that offends.

The clergy obviously, and correctly, believe that they have a message to convey; and they are properly anxious that this message shall be received not only by the old and middle-aged but by the young. In university churches and chapels they have large congregations aged between 18 and 21. Now this might lead the preachers, like advertising men, to do some research into the tastes, interests and aspirations of the target audience. But instead of this, it tends them to adopt a peculiar kind of vulgarity of voice and vocabulary, far removed from the vulgar tongue itself, and a style quite inappropriate to the cream of British intellect, supposedly gathered in the university.

Not only are the congregation, mostly undergraduates, presumably of above-average intelligence, but the subject matter of a sermon is the serious. Religion, after all, concerns itself with questions of fundamental importance. It is concerned with death and with birth, with the point of life, with the place of man in the universe as a whole, with the moral

law, with the duties of one human being to another, with their deepest hopes and fears. Most people do not think about such subjects very often of the time; but when they do, they are not likely to be in a joking or facetious mood.

Why is it, then, that the clergy (with some honourable exceptions) see fit to adopt a tone of abuse that those who are there to listen to them will not do so unless they are treated to a laugh a minute; entertained in knock-about style, with sexual innuendoes only less offensive than those of Benny Hill? To make things worse, the actual words and phrases employed in this farce are, almost without exception, out of date. And this constitutes an extra, acute, source of embarrassment.

"Some of you," they cry, "will like saying 'Jesus get lost'. You just don't want to know". Now that is a perfectly respectable thought. There are certainly numbers of undergraduates who have no interest in Christianity and who, if anything, dislike it. But why express the thought in these words? There are other ways to put it.

"Some of you think," the clergyman continues, "that the best plan of life is to do your own thing". When did this awful phrase come into existence? Perhaps it was currently used in the mid-sixties; certainly not later. Now, in 1981, it is hardly an "in-going" cliché. It is used exclusively by those who, pathetically, wish to show themselves to be non-conformist and one of the last open though concerned with the high-sounding (but don't forget put-off) stuff about Jesus. Again, though I cannot date it, there must once have been a time when children described grown-ups, or sedate contemporaries, as "square". Now the word is unheard except on the lips of the elderly, and the clergy (even quite young).

I do not greatly care for the vernacular in church services. I prefer the proper, prayer-book, words. But if vernacular it must be, then let it at least be real words, not ossified and outmoded slang, a living proof (rather a dead one) of the fatuous ignorance of some of the clergy, and their terrible contempt for the intellect and the sensibilities of their not unintelligent congregations. They are lucky to have a free pulp; a privileged access to what is nowadays a sizeable audience. They should be ashamed to abuse their luck.

Process and product

The Centre for the Study of Comprehensive Schools has had its ups and downs since those two energetic heads, George Walker and Neill Ransom, launched it at York last year, but the appointment of George Gye as its first director ought finally to ease it into place on the educational map.

From the beginning the centre has had solid backing from industry for its declared aim of trying to improve what goes on in our secondary comprehensive schools by spreading the word on good practice and good management, although the Schools Council and the DES have been more equivocal in their support. However, last year's opening conference on "Towards Good Schools" was followed by another, equally successful, this summer on "Schools

and Employment in the 1980", which got down to some major rethinking on the school curriculum.

George Gye, who is being seconded to the centre for one year from his job as head of Springfield School, Middlesbrough, should be recognized by TES readers as particularly suited to constructive follow-up work and dissemination on both these themes.

He wrote a notably trenchant comment for us on the DES's document on *The School Curriculum* when it appeared in the spring.

The cosmetic surgery of this particular paper fails to hide a fundamental need for a reappraisal of the traditional curriculum. . . . The signatories still see education as a 'product' rather than a process."

He was in a strong position to advocate, as he went on to do, that schools should literally open up the curriculum to the world outside, because another article in January - this time by Susan Holmes and Mar-

tin Lightfoot - had described how he and Springfield had done just that as part of the Schools Council Industry Project.

In a perilous but rewarding experiment, Springfield gave the community - represented by trade unions, small businessmen, industrialists and others - the fourth year's Tuesday afternoons. The calculated risk paid off and grew into a regular social education programme and now the outside world is always in the school. George Gye, in short, should have something to feed into both sides as he sets about building up the centre, its membership and a regional network and goes looking for more support from teachers, schools and industrial companies.

Meanwhile the first newsletter is out and copies of the report on the Schools and Employment course and its main recommendations are available from CSCS, Goodricke College, York - free to members and £2 to non-members.

Ex-children

Derbyshire County Library has abolished children and redesignated them young people. This may seem to be a typical local government ploy to use two words where one will do, but the Assistant County Librarian (Services to Schools and Young People) assured an audience in London last week that it was rather to be seen as signifying a "new attitude" to the customer and what, for librarians, has become a buyers' market.

The audience had been at the National (old: attitude) Children's Bureau for a conference on "The Research Perspective" in children's librarianship. Actually there was not much in the way of conferring, because six hours were spent listening to a procession of speakers proclaiming the research that they were engaged in. Revelation followed upon revelation. A lady from Birmingham showed how the appearance of a West Indian steel-band in a public library attracted an audience of West Indian origin. A lady from Sheffield proved conclusively that a lot of teenagers like reading *Jacky* and *Blue Jeans*. A lady from the National ETUUC press statement implied, Book League spoke about the though two French unions had be-

league's new centre for children's books (started with a generous grant from the Arts Council) and was enthusiastic that they were now able to include paper-engineers in their catalogue of authors and illustrators. And a lady from Loughborough used a battery of colour-slides to show that "young people" are sometimes restive when being told stories in libraries.

Professional librarians, who are very sensitive about financial constraints, must be pleased and proud that we still have time and money to carry out essential research projects of this kind.

Euro-truce

Mr Fred Jarvis, general secretary of the National Union of Teachers, has taken issue with the paragraph in *Break* last week about the formation of the European Teachers Trade Union Committee (ETTUC). He points out that the World Council of Organizations of the Teaching Profession (WCOTF), of which the NUT is a leading member, was never part of the European Teachers Trade Union Committee (ETTUC) as an official body. ETTUC press statement implied, Book League spoke about the though two French unions had be-

longed to both organizations. The unions associated with the ETTUC were mainly those belonging to the IFTU of which the NAS/UTW is a leading member.

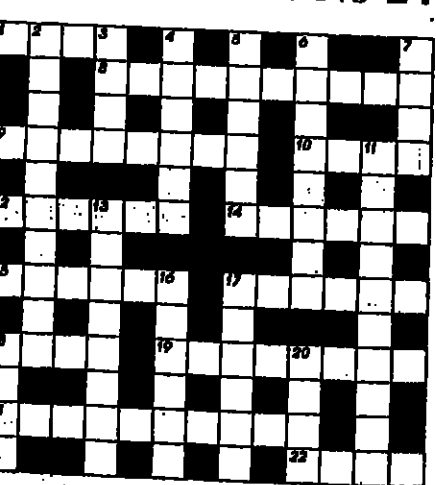
As to the appointment of an executive committee for ETTUC, Mr Jarvis says that WCOTF's aim was to divide the offices reasonably between WCOTF and IFTU, so that the leadership of the new body should not appear to be dominated by either. In particular, Mr Jarvis denies making any speech in the executive committee opposing the appointment of Mr Terry Casey as Treasurer. Mr Casey's appointment for one year, till his retirement, had been agreed in prior negotiation.

Aristides

Next week

- The contracting curriculum: James Mason on the case for drama.
- Books: Fom Corfe on historical atlas; Nicolas Mackintosh on a new study of the IQ debate; special pages of sixth form humanities books.
- Extra: Computers in Education.

TES Crossword No 24



- Across
- 1 They are fast replacing buttons (4)
 - 8 A well-supplied business organization (3,7)
 - 9 Multifunctional two-timer (6)
 - 10 Play group (4)
 - 12 Hasten to provide foreign capital (6)
 - 14 Actually it's about a friend (6)
 - 15 He provides a now setting for the doctor (6)
 - 17 Roman emperor is back and about to depart for part of America (6)
 - 18 Where needles are kept, just in case (4)
 - 19 Visibly in tears (8)
 - 21 Overdraw an account (6)
 - 23 Cross, perhaps, who vote against (4)
- Down
- 2 Vague intention (4) - vaguely held back (6)
 - 3 Chemical gives rise to difficulties (6)
 - 4 They fight with one another (6)
 - 5 Bill for publicity (6)
 - 6 Wine steep in the pot (6)
 - 7 End in the street (4)
 - 11 Outline a new house (10)
 - 13 Return from work (8)
 - 16 Decline - with late installation (6)
 - 17 Expenditure for foreign exchange production (6)
 - 18 Witnesses a key moment (4)
 - 20 Oriental state of journey (4)
- Solution to Puzzle No 23
- Across: 1. Buttons, 2. Intention, 3. Chemical, 4. Fight, 5. Bill, 6. Wine, 7. End, 8. Multifunctional, 9. Play group, 10. Hasten, 11. Outline, 12. Return, 13. Decline, 14. Witnesses, 15. Actually, 16. Roman, 17. Where, 18. Visibly, 19. Overdraw, 20. Oriental, 21. Cross, 22. Against.
- Down: 1. Buttons, 2. Intention, 3. Chemical, 4. Fight, 5. Bill, 6. Wine, 7. End, 8. Multifunctional, 9. Play group, 10. Hasten, 11. Outline, 12. Return, 13. Decline, 14. Witnesses, 15. Actually, 16. Roman, 17. Where, 18. Visibly, 19. Overdraw, 20. Oriental, 21. Cross, 22. Against.

By Rufus

Down

- 2 Vague intention (4) - vaguely held back (6)
- 3 Chemical gives rise to difficulties (6)
- 4 They fight with one another (6)
- 5 Bill for publicity (6)
- 6 Wine steep in the pot (6)
- 7 End in the street (4)
- 11 Outline a new house (10)
- 13 Return from work (8)
- 16 Decline - with late installation (6)
- 17 Expenditure for foreign exchange production (6)
- 18 Witnesses a key moment (4)
- 20 Oriental state of journey (4)

- Solution to Puzzle No 23
- Across: 1. Buttons, 2. Intention, 3. Chemical, 4. Fight, 5. Bill, 6. Wine, 7. End, 8. Multifunctional, 9. Play group, 10. Hasten, 11. Outline, 12. Return, 13. Decline, 14. Witnesses, 15. Actually, 16. Roman, 17. Where, 18. Visibly, 19. Overdraw, 20. Oriental, 21. Cross, 22. Against.
- Down: 1. Buttons, 2. Intention, 3. Chemical, 4. Fight, 5. Bill, 6. Wine, 7. End, 8. Multifunctional, 9. Play group, 10. Hasten, 11. Outline, 12. Return, 13. Decline, 14. Witnesses, 15. Actually, 16. Roman, 17. Where, 18. Visibly, 19. Overdraw, 20. Oriental, 21. Cross, 22. Against.

THE TIMES Educational Supplement

FRIDAY NOVEMBER 13 1981 NUMBER 3411

Local authorities at 'risk' in wake of £6,500 eye-damage case ruling Lunchtime safety is duty of l.e.a.s - Judge rules

by Richard Garner

Local education authorities are to be warned they face damages bills totalling thousands of pounds if they leave schools inadequately supervised at lunchtime.

The warning comes in the wake of a judge's ruling that Coventry District Council should pay £6,500 damages to an 11-year-old boy whose eye was damaged by a paper clip fired at him while children remained in their classrooms during a wet lunch-time at their school.

Sir Basil Nield, sitting as a Deputy High Court Judge in Birmingham Crown Court to hear the case, said that a dinner lady had been given the task of supervising two classrooms and that the boy was to blame himself unduly for the misfortune suffered by one of my children, to use her warm phrase.

"She should have had assistance and if there had been more supervisors the accident - and indeed the confused state of things at the two classrooms and their entrances - would have been avoided."

Mr David Hart, general secretary of the National Association of Head Teachers, said his organization was advising its 21,500 members to con-

tact all chief education officers if they considered that supervision was inadequate and warn them that the local education authority "would be at risk" if there was a similar accident.

He said he knew of three county councils which were already considering the implications of the judgment and expected his next national council meeting to press for a meeting with the Association of County Councils and the Association of Metropolitan Authorities to discuss the issue.

"Let's face it," he said, "There are going to be an awful lot of wet lunchtimes in a climate like ours where this sort of thing could happen."

Mr Doug McAvoy, deputy general secretary of the National Union of Teachers, said the issue had been raised at the teachers' panel of the Council of Local Education Authorities' schoolteachers' committee where all the teachers' organizations had agreed that it was the duty of an authority to ensure the safety of pupils at lunchtime.

He said the judgment should serve as a warning to local education authorities cutting staff without thinking of the consequences.



Self-defence for young gentlemen... Michael Finn and pupil

Labour fixes 16-19 training plan

by Mark Jackson

Last minute changes have had to be made to the Labour Party's blueprint for a new tertiary system of education and training for all 16 to 19s. Some teacher members have forced changes on the education subcommittee which drew up the document.

The amended draft was approved by the party's home policy committee this week. It retains all the salient proposals: common citizenship for all young people, state financial support for colleges providing for the whole ability range within a unified curriculum framework and using a system of related assessments.

The changes are in a section which deals with vocational preparation, which the subcommittee says should be provided for all youngsters, whether or not they are in schools and colleges full-time.

The subcommittee's draft, its fifth, endorsed the view of the Further Education Unit, the autonomous team which advises the Education Secretary on the FE curriculum, that many youngsters will learn the basic skills they need for adult and working life only through a curriculum based on their daily experience "not mediated through the traditional corpus of academic subjects".

What stuck in the throats of the secondary school lobby was the list of ingredients for an education and training system to meet the needs of such youngsters, taken from the FEU's publication. At the head of the list were: a negotiated curriculum, a personal programme or learning agenda, and the concept of a learning contract.

When telly turns off teacher

by Virginia Makins

A group of four-year-olds in a Norfolk primary school field name 60 television programmes between them. Their favourites included *Star Trek* and *The Late Film*. Another group of 22 seven to 11 year olds could contribute the names of 242 programmes, many of them no longer being shown.

Mrs Gwen Dunn, who recently retired as head of Whifflet primary school in Suffolk and served on advisory councils for both the BBC and the Independent Broadcasting Authority, has interviewed children about their viewing.

With the spread of videocassette recorders, she says, it's now possible for a child to come to school having viewed two horror films that

be provided for all youngsters, whether or not they are in schools and colleges full-time.

The subcommittee's draft, its fifth, endorsed the view of the Further Education Unit, the autonomous team which advises the Education Secretary on the FE curriculum, that many youngsters will learn the basic skills they need for adult and working life only through a curriculum based on their daily experience "not mediated through the traditional corpus of academic subjects".

What stuck in the throats of the secondary school lobby was the list of ingredients for an education and training system to meet the needs of such youngsters, taken from the FEU's publication. At the head of the list were: a negotiated curriculum, a personal programme or learning agenda, and the concept of a learning contract.

Some members were worried that the idea of being forced to negotiate the school curriculum with pupils would alarm teachers. They agreed to allow the draft to go forward only on the understanding that the party's education research officer, Mr Bert Clough, would replace the offending phrase by a formula which made it plain that all that was meant was that each youngster would work out with the school or college what he or she needed to study. The objectors also insisted on the removal of the references to the Further Education Unit.

A full report on Labour's 16 to 19 plans is on page 11.

Getting to grips with trouble...

by David Lister

All girls should learn self defence at school, Mrs Heather Brigstocke, headmistress of St Paul's Girls' School and president of the Girls' Schools Association, urged this week.

Mrs Brigstocke has made lessons in self defence compulsory for all pupils at her school. They are taught by Mr Michael Finn, a martial arts expert.

Female members of staff at the school have now asked her if a course in self defence can be set up for them. At the GSA annual conference this week Mrs Brigstocke urged fellow heads to set up similar courses at their schools. She said: "There is no point talking about opportunities for women if they have to stay indoors."

Mr Finn, a former policeman who holds 18 black belts in eight different martial arts, has taught Royal Marine Commandos and American military police.

In addition to self defence, he teaches the girls how to spot a pick-pocket and how to make the home secure.

He said this week that he teaches a "non-violative technique". "I try to move away from the TV concept of *Purdy in The New Avengers*."

Learning problem

Badly-shaped palates could affect a child's ability to do well at school. Preliminary research carried out by the Association for Children with Learning Difficulties points to a connection between the height and shape of the palate and learning difficulties.

This week

Protest over SDP policy group 3

Middle school muddle 4
Briefing 9

Clash over teachers' pay 5

Profile of a 'superteacher' 7

Klan teaching kit sparks row in US 13

Amsterdam's child junkies 18

Geography off the shelf - onto the coffee table 20

N. J. Mackintosh on IQ 23

Scottish disquiet over micro breakthrough 25

Classified 26

Comment 2
Platform 4

School to Work 11
Overseas news 12,13

Letters 14,15
Talkback 16

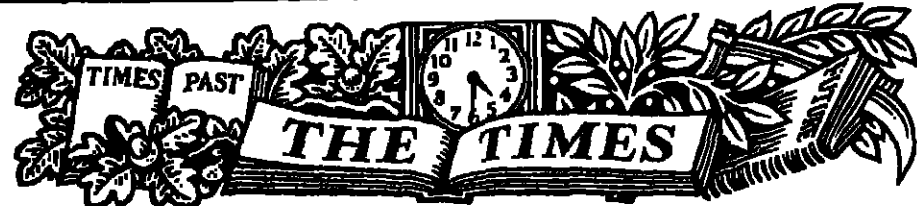
Features 17-19
Review 20

Arts 21,22
Books 23,24

Resources 25
Aristides, Crossword and Personal Column 64

Extra

Computers in education 29-42



EDUCATIONAL SUPPLEMENT

PO Box 7, 200 Gray's Inn Road, London WC1X 8EZ. Tel 01-837 1234

A comprehensive view of 16-19

The Labour Party's discussion document on *The Education and Training of the 16-19 Age Group* has now cleared another hurdle on the way to publication and, with minor amendments to the phrasing, the version now circulating is what will appear in due course. Opinions will vary according to obvious divisions about the merits of specific propositions in the report. But supporters and opponents alike should welcome the breadth of view which has been taken. Here is an attempt to consider the needs of the whole age-group - those in full-time education, those in jobs and those who are unemployed - and devise a framework of institutions, opportunities and obligations which can comprehend them all.

If Conservatives take issue with the ideology behind the Labour approach, they should nevertheless accept the form in which the questions have been raised and meet the issues in argument rather than allowing them to go by default by concentrating on the parts rather than the whole.

This said, it is easy to see what a difficult task the policy group had taken on. The opening sections provide a useful historical and analytical beginning. They show how successive governments since 1918 have failed to tackle industrial training and continuing education. Time and again attempts to reform the arrangements for the transition from school to work - by reforming apprenticeship and encouraging new ways of integrating general and vocational education with vocational training and work experience - have been frustrated by economic crises and lack of political will.

What has brought the needs of the 16-19s to the fore now, unfortunately, is the appallingly high level of unemployment - a manifestation of exactly the kind of economic pressures which prevented Fisher's day continuation schools or Butler's county colleges from getting beyond the statute book.

This Labour document is a very long way from being a policy.

It is an attempt to sketch the outline of a new system with very far-reaching implications for the schools (before and after 16), the further education system, employers, trade unions, the universities and polytechnics. The Labour document is in no mood to consider how to deal with resistance. To fill in the outline there would have to be a willingness to renounce the dominant values which now govern British higher education. Once again, the document is adding its voice to those who believe that the "academic" values which the universities have bequeathed to high quality secondary education have distorted the provision which is made (or rather not made) for the great majority of 16-19s who don't go on to study for degrees. Instead of seeking to develop counter-values elsewhere in the system, the Labour answer is to weave a new seamless robe - a new comprehensive curriculum - involving education, training and work experience for all.

If the Party's aim is a truly comprehensive system of education with an open system of post-16 education and training where opportunities are accessible to all and the resources available are shared by all, then it follows logically that all young people should be given a common status. In expanding provision for the age group we do not wish to superimpose the former grammar school/secondary modern school system on to the tertiary stage of education. We must avoid building a system where at the top are young people on full-time courses in schools preparing for higher education, under them are those skilled workers in apprenticeships released to further education colleges and at the bottom are those unskilled workers in training schemes or unemployed on YOP. It is for this reason that we propose that all 16 to 17-year-olds should be termed "trainees". All would be receiving education, training and work experience albeit in different proportions according to the courses they were on. Furthermore, they would all be able to attend the same institutions regardless of previous attainment.

With such a grandiose aim, it is hardly surprising that much of what is said about curriculum and assessment is obscure, cloaking ambiguity of interpretation and the wealth of disputation which is waiting to break out when the clarity of action is required.

The task of turning this vision into a policy is going to be even harder than that of catching the vision. Small steps cost more real money than the dreaming of dreams. Somehow Mr Kinnock and his colleagues now have to work out a limited and feasible programme with the kind of time-scale which makes sense for five-year parliaments. Whatever else they assume, they can only expect to carry out the first stages of such a programme against a background of continuing economic distress.

DES conduct their business which is damaging in the long term. Meanwhile, in another part of the forest, Mr William Waldegrave and representatives of the local authorities have been putting the finishing touches to the plan for an interim national body for advanced further education. No one can accuse Dr Boyson's successor of dragging his feet. At the moment, relations between the authorities and the DES on this topic seem singularly cordial where recently they were at breaking point. When the new body starts to wield the knife the cordiality will not last long.

Teachers' pay - what gives?

As expected, the teachers have decided to line up their pay claim with all the other public sector unions and peg it to the cost of living index. The local authorities' response is equally predictable in the light of the 4 per cent which the Government intends to provide in the Rate Support Grant for this pay round. Negotiation is therefore virtually ruled out - at any rate, until there has been a ritual confrontation and the hands of the clock are coming up to midnight.

The plans for changing the teachers' pay structure to take account of the altered needs of a contracting school system will not be ready for this year's talks. It must, in any case, be doubtful if this can be carried through without at least some marginal money to deal with anomalies. As for the long-awaited merger of negotiations on salaries and conditions of service, there is no sign yet that Sir Keith is ready to take that particular bull by the horns.

Early legislation is not expected and the authorities seem now to realize that they have little leverage with which to pressurize the teachers into accepting the change in a year when there is only 4 per cent on the table.

Since last time the rules on arbitration have been changed: in 1982 the pay claim will only go to arbitration if both sides agree. The Government has taken a strong dislike to arbitration in the public sector because arbitrators tend to split the difference between claims and offers and thus always defeat tough policies put forward by the employers. The situation, then, is that the teachers' pay claim will be decided by the Government.

Authorities, also, have taken this view up till now, but as the prospect of the 1982 Burnham deadlock approaches, arbitration once again begins to have a certain expedient attraction.

And yet they come...

It is now becoming safe to say that the recent spate of projects - many coming from individual schools, some from researchers - that have involved parents directly in teaching their children provide one of the most hopeful educational developments going.

The latest comes from Inner Manchester (page 1), where nursery and infant teachers showed a group of parents what they did to develop children's language. This project had properly constituted control groups; once again, the parent involvement groups showed a gain of six months to a year over the others, and the gain seems to have been maintained for 18 months.

The professional help offered to parents by the teachers (or, on occasion, educational psychologists) has been the crucial ingredient in these projects. Many schools that have found it difficult to bring parents into schools as they would like, particularly parents with severe economic or social difficulties, are now devising their own schemes along these lines.

The potential seems enormous. These projects demand extra effort - but not extra resources. They promote what both teachers and parents most want - closer links between home and school, and children who have developed at home the basic language skills that their education progress depends on.

No Comment

"The Secretary of State has considered whether it would be appropriate at this time to examine institutions' entry targets for undergraduate teacher training courses. On balance he has concluded that this is unnecessary in view of persistent under-recruitment... He would also wish institutions to regard likely suitability for teaching as an important factor in selecting candidates."

From DES Teaching Training Circular Letter 385, 2 November 1981.

Shirley fights her own radical past

Mrs Shirley Williams has only two more votes in which to win the hearts and minds of voters of Crosby. As a former Cabinet minister and a darling of the media she stands many advantages; for every local who is offended by a carpet-bagger from London there will be two or three who find it easier to believe in her because they have seen her on television. It goes without saying, also, that she is an excellent candidate who many would like to have as their MP even if it doesn't share all her views. Her chances are particularly important in a short campaign.

But if she has a lot going for her - including the persistent support for the SDP in the opinion polls - does this include her threats against the independent school? The harder she tries to insist that private education is not an issue, the more time she has to spend trying to put some distance between her own candidature and her former advocacy of legal measures against fee-paying schools. It is with reluctance that I for one conclude that the freedom to send one's children to an independent school is bought at too high a price for the rest of society. *Politics & People*, p. 158.

It is a splendid issue for her Conservative opponents to hammer away at because of its obvious embarrassment, and because she has had to back away from her former, dear position as her Social Democratic colleagues are not prepared to support it. They want to fudge it with easy formulae about widening tax privileges - the promise which figured in all Labour manifestos since February 1974 without ever being put into effect.

When Mrs Williams insists, with irritation, that this particular argument is a "liberal



ring", you know what she means. It is a distraction from the major questions of economics and employment, and it is, also, from the substantial educational anxieties about the effect of cuts in schools, colleges and universities. But whose fault is that? If politicians are chasing hares, who can blame the media and the hares - for taking up the hunt?

According to the *Daily Telegraph* some 8,000 Crosby voters have children at independent schools (can this be right?). If you add to this figure all the former pupils of the independent schools, and those who have in adult life sent their children to them at some date, you end up with a formidable minority to set alongside the 60,000 or so people who voted last time.

People are already commenting on Mrs Williams' attempts to wriggle out of the line she has got herself into. Over the weekend she told her supporters: "We must improve the maintained sector to the point where parents no longer feel driven to pay for private education". This, of course, is the classic formulation of the 'fifties and 'sixties - a far cry from Mrs Williams' sudden radicalism of 12 months ago. But it accords far more readily with the message of moderation and reasonableness which she has been peddling since she was elected, and no less important, with the Shirley Williams image before she collected her allowance.

In another constituency this would not have been anything like so important. In Warrington, for example, it would not have caused this fuss. Although the opinions polls give support to the idea that the abolition of public schools is the abolition of public education, it is quite possible that public opinion would change if people like Shirley Williams were campaigning single-mindedly to that end. But not in Crosby, where it can only be a matter of time before the SDP-Liberal alliance overcomes this local difficulty and still goes on to win. It will speak even more eloquently of the strength of the SDP-Liberal alliance.

Stuart Mac

Protests over 'trip of misery'

by Sarah Bayliss

A girls' school in Cheshire is seeking compensation for a trip to Paris which was marred by cramped and verminous accommodation, meagre food and uncooperative service.

A party of 39 girls and four staff from Tytherington county high school in Macclesfield had their half-term holiday partly ruined by miserable accommodation and meals in the French capital.

The group leaders have written to Home and Overseas Education Travel, the firm which organized the four day trip, cataloguing their disappointments and demanding some compensation for the lack of service, food and comfort.

Mrs Patricia Davis, head of art, who booked the 269 trip told *TES* this week: "We understood that the conditions would be pretty basic but we had not anticipated such primitive standards."

The travel company has said that in eight years of business it has never received such complaints and is investigating them. Mrs Davis stressed that Home and Overseas Education Travel had been most helpful in making the arrangements.

The letter from Tytherington county high to the company states that accommodation at the youth hostel Maudslayi was extremely cramped. In particular two staff had to share bunk beds in a room 12 feet by 9 feet. "In order to wash one person had to lie on a bunk to give the second person space to move in."

Mrs Pauline Wilby, a year tutor on the trip, said this week: "I'm 52 years old and I was most uncomfortable on a top bunk - I barely slept at all."

The letter states that late one night a mouse ran over a girl's foot and up a bunk-room wall. "It was extremely difficult to calm the girls down after that particular incident," said Mrs Davis.

There seemed to be no limit on how late residents came in and people were woken by other groups arriving at anti-social hours. Some girls were forced to share a room with an outsider not in their group.

For lunch and supper the girls had to travel by coach to a restaurant. The distance was "ridiculous" and at least one hour a day spent in traffic jams.

There was insufficient food and when it came it was very poor. One lunchtime they were sent to another restaurant "where the food was possibly worse."

Mrs Davis, who took mostly O and A level pupils, said: "We do feel we got an extremely raw deal. I must say when we weren't in the hotel or restaurant we had a fabulous time."

Mr Tim Pretty, director of Home and Overseas Educational Travel said: "Obviously things went wrong for this group and we regret that."

He pointed out that an emergency telephone number was printed on the cover of the firm's brochure and he wished the teachers had contacted him in England on that number during their stay.

He had sent a copy of the school's letter to an agency in Paris - *Maison Internationale de la Jeunesse des Etudiants* - which ran the hotel and which came "under the auspices of the French ministry of education."

Between 12 and 15 groups a year were booked into the M.I.J.E. accommodation and there had only two or three complaints about noise.

Mr Pretty said it was "quite wrong" that pupils had to share a room with an outsider and his firm would insist that action was taken about vermin. Other complaints raised by the school would be investigated.

Mr Pretty said his firm depended on getting repeat bookings from schools and indeed 63 per cent of bookings were with regular customers. The Tytherington staff would be expected within 7 to 10 days once the complaints had been checked.

SDP snub to independent schools

by David Lister

Independent school representatives have been left off the proposed education policy making group in the Social Democratic Party.

Also surprisingly excluded from the list of names obtained by the *TES* is Mr Tyrrell Burgess, North East London Polytechnic academic, who wrote the discussion paper on education for the Party's conferences last month.

The list of names put up by SDP headquarters includes: Mr John Roper MP, chairman, Lord Perry of Walton, Sir Frederick Dainton, Mrs Jean Floud, Lord Kilmarock, Sir Norman Lindop, Mr Tom McNally MP (the party's new education spokesman in the Commons), Mrs Anne Sofer, Sir Peter Swinerton-Dyer, and Dr William Taylor.

The absence of independent school representatives on the education and training working party has led to a sharp protest to Mr Roy Jenkins, one of the SDP leaders, by Mr Frank Fisher, chairman of the Independent Schools Joint Council action committee.



Column one: college lecturer Sue King with "Voyages of Discovery" a ceramic sculpture by colleague Jim Robinson which will be exhibited in a Bolton housing estate.

Suffolk jobs threatened

Jobs of more than 100 teachers are threatened by the need to cut more than £1m off Suffolk County Council's education estimates next year. This sum to be in addition to the £800,000 already identified.

Other drastic measures being considered include the closing of nursery schools and the removal from school syllabuses of swimming lessons and music tuition.

Mr Duncan Graham, Suffolk's Chief Education Officer, warns that consideration of cuts in the teaching force is "inevitable" and this in turn would lead to larger classes, less help for backward children and more limited choice of courses. Rather than economies, millions were required to bring up the county service to reasonable standards, he said.

Nearly half a million pounds were needed to bring Suffolk up to the national average in terms of per capita allowances for pupils, he added.

Council dispute closes schools

More than 60,000 Coventry schoolchildren had an unofficial holiday this week when a strike by council workers closed all the city's schools. Teachers reported for work on Monday but most of 170 schools were picketed so children were sent home with homework.

The stoppage was caused by 4,000

He has written to Mr Jenkins saying he is very disappointed that there is no voice of the independent sector "not only because of our experience in providing opportunities for children of all sorts of differing abilities in the independent sector, but also because I feel that here is a golden opportunity to rethink the whole provision of education at secondary school level."

Mr Tim Devlin, director of the Independent Schools Information Service, who is a member of the SDP, said this week: "After not being called to speak at the SDP conference I am not surprised at not being included on this committee. But I would obviously not turn down a request. I am especially surprised that John Rae (head of Westminster School) has not been included."

Mr McNally said this week that public schools were likely to be a big issue when the group meets but he did not want them to become obsessed with it. "I would hope," he said, "that we will look at the 94 per cent

of children who don't go to public schools."

He added that he did not know why Mr Burgess had been excluded. "We will think about whether it is the right group and whether persons are missing," he said.

Mr Christopher Smallwood, the SDP's policy coordinator and a former Cabinet Office and Treasury civil servant, told the *TES* this week: "We have started from square one with the working parties trying to get the right balance. We did approach some independent school people, but they didn't want to be members. There is absolutely no hostility here. One of our constant irritations is that people think we want to abolish independent schools. We have been flooded with thousands of people wanting to be on these working parties and have tried to be as open minded as possible. We have large numbers of people standing behind this committee who can give help."

Earlier this week Mrs Williams said the SDP would take steps to

remove bias in the educational system and would end special examinations to the ancient universities for public school pupils and the scholarship places "tenable only by boys from the main independent schools." The Party would also review the charitable status of independent schools, she wrote in an article in the Roman Catholic journal *The Universe*.

This week Mrs Williams became irritated by a circular from the Independent Schools Information Service telling its members in Crosby to raise the issue of independent education during the campaign.

And former Conservative education secretary Mr Mark Carlisle said this week: "She did her best to kill the Merchant Taylor Schools, St College and the other independent schools of whose traditions Crosby is rightly proud. Her 'conversion' on the road to Crosby is a ploy aimed to deceive the electors and to promote her own political ambitions."

Better graduates hint from Sir Keith

by Biddy Passmore

A higher standard of graduate could emerge from the current period of higher education cuts, Sir Keith Joseph, Education Secretary, told MPs this week.

Giving evidence to the Commons Select Committee on Education on Wednesday, he said the Robbins principle that higher education courses should be available to all young people qualified and wishing to take them needed to be redefined.

It was true that the chances of an 18 year old entering higher education in 1983 were less than in any year in the recent past. Within that reduction, however, there were more

opportunities relatively in fields necessary to the economy.

The vice-chancellors committee estimates that present Government policy will lead to the loss of some 10,000 places for home students in each of the next two or three years, thus reducing opportunities for young people by about 1 in 7.

The Education Secretary confirmed that the option of introducing student loans is once again under consideration.

The brush-off given this week to university vice-chancellors who went in plead with the Education Secretary, for more time to make cuts may

spell doom for the universities' proposals for a national redundancy scheme.

The vice-chancellors say that implementation of their scheme under which some lecturers would get lump sum payments of over £50,000, which was sent to the University Grants Committee last week, would depend on additional Government allocations to the University Grants Committee. It cost has been estimated at between £180m and £250m. But at Monday's meeting, Sir Keith said flatly that he would offer the universities no relief whatsoever in relation to the timing or scale of the cuts.

"Since taking over as Principal I have become aware of the valuable services Wolsey Hall can offer to school and college students."



- Fully tutored courses in 'O' and 'A' level subjects which are not available in the curriculum.
- School or college-based supervising pupils working on courses provided by Wolsey Hall. Courses available include pre-O level preliminary courses, and courses at 'O' and 'A' level in over 70 subjects (for most examining Boards) including a wide choice of options within a subject.
- Revision courses for those needing to retake exams.

In addition Wolsey Hall offers a wide range of London University degree and professional examination courses.

Please telephone or write to me for further details-

The Hon. Frank Fisher, C.B.E., M.C., M.A., Principal, Dept. BD1, Wolsey Hall, Oxford OX2 6PR, Tel: 0865 54231 (anytime) or simply fill in the coupon.

Please send me full details:-

Name: _____

Address: _____

ACCREDITED COUNCIL MEMBER AHCC

Fight on for Holland Park

by Sarah Bayliss

Parents with children at one of the first and most progressive comprehensive schools in the country are opposing a merger plan which they say would destroy the ethos of the school.

They have written to Sir Keith Joseph, the Education Secretary, formally objecting to an amalgamation of Holland Park school in West London with two others - the Isaac Newton and Ladbroke schools.

The amalgamation proposed by the Inner London Education Authority would mean closure notices being served on all three schools and all teachers re-applying and competing for jobs at a school on the Holland Park site.

The four children of comprehensive schools campaigner Mrs Carole Benn and her husband Mr Tony Benn MP attended the school. Mrs Benn, a former chairman of the governors told the TES: "Many of the educational and social decisions taken in this school have led the way for others."

Mrs Benn, who was chairman of the school's governors for 12 years until recently, said that the school was the first in London to abolish corporal punishment - some eight years ago - and it had been one of the first to abolish compulsory school uniform.

A statement from the governing body states that the school is renowned for its innovation and to close it "would be interpreted... as a sign of failure of the comprehensive idea."

At a press conference this week Mrs Charlotte Gibbons, chairman of the governors with two children at the school, accused the ILEA of issuing closure notices for reasons of "bureaucratic expediency."

"The Authority seems to regard schools as if they are merely filing cabinets for pupils which can be opened and shut without disruption."

But the option of a triple closure with all the teaching jobs "up for grabs" would cause maximum disruption.

The school should be judged on its merits and should not be closed simply because of the implications for other amalgamations elsewhere.

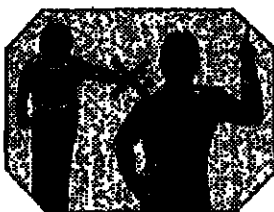
Dr Derek Rushworth, the head teacher, said the school's intake had fallen by only 26 per cent over the past five years while it had fallen roughly 70 per cent in the other two schools and by 40 per cent in the area generally.

"All the evidence suggests that we are an increasingly popular school among parents," he said.

Mrs Margaret Morgan, chairman of the ILEA's development Sub-committee said everything would be done to avoid disturbance for pupils at all three schools.

Mr Mark Carlisle, the former Education Secretary set a precedent for saving an individual school from merger when he refused to approve the closure notice on Highbury Grove school in North London which was to have merged with another neighbouring school.

Making the change



How corporal punishment has been successfully phased out in some schools.
£2.95 paperback 0340 28175 8
£5.75 hardback 0340 28180 4
HODDER & STOUGHTON
The Scottish Council for Research in Education

Platform

Rationalizing provision at 16-plus and economic expediency are leading to the surreptitious unscrambling of three-tier systems. Andy Hargreaves and Les Tickle urge teachers to speak out for a "fair trial" based on informed judgments of what 9 to 13 schools can offer.

Middle school muddle

Most boxing aficionados will have heard of a highly effective pugilistic strategy called the Ali shuffle. People involved in or on the receiving end of recent moves to bring about education reorganization in some areas will also be familiar with an equally striking manoeuvre - the I.e.a. shuffle. Pugilistic and administrative "shufflers" alike tend to "move like butterflies and sting like bees", but there is also a crucial difference between them. While the main purpose of the Ali shuffle is to inflict punches while avoiding getting cut, exponents of the I.e.a. shuffle prefer to inflict cuts while avoiding getting punched.

Two kinds of I.e.a. shuffle are currently underway. The first - rationalizing provision at 16-plus - is well known, not least because of the wide publicity it has received in the educational press in recent months. Indeed, mainline educational reporting has been virtually monopolized by 16-plus issues over the past two years or so. But while such matters as the pros and cons of sixth form colleges, common examining at 16-plus and procedures for managing the transition between school and work have been the subject of intense debate, a number of I.e.a.s have also been quietly mulling over the possibility of a second and not unrelated shuffle which involves dismantling a substantial, quite recent and highly innovative sector of educational provision - middle schools. So far these I.e.a.s have escaped with the luxury of deciding upon the fate of their middle schools in the absence of any nationally coordinated opposition from teachers, parents or educational researchers.

These changes are not entirely unexpected. For instance, the possible demise of middle schools was predicted by Dudley Fiske when he addressed the North of England Education Conference at the beginning of 1979. In the same year, on the basis of a survey of its middle school members, the National Union of Teachers concluded that middle schools could well be doomed in many areas if no one saw fit to protect their specialist teaching by policies of more generous staff resources. And in our own book on the threats such schools faced - from within as well as from without - and noted the uncertain nature of their very survival if those threats went unchallenged.

Such intermittent warnings apart, though, it is perhaps a sad but accurate reflection of the top-heavy 16-plus bias of current educational priorities and debate that the nature, status and very existence of middle schools in the 1980s should become public "news" only as late as this ("Empty seats could lead to closure for 200 middle schools", *The TES* November 6).

In practice, the two types of reorganization - middle schools and 16-plus - are closely connected. The fate of middle schools is not wholly determined by falling rolls and economic recession. More crucially, it is affected by the educational climate within which such constraints are exercised - one where policies are heavily skewed towards the alleged requirements of the final years of schooling. For instance, while falling rolls lead to a loss of specialist teaching expertise in many middle schools as scientists, modern linguists and home economists etc. leave and are not replaced, this has become a particularly serious issue only because the demands for more and better specialist teaching at all levels have escalated in recent years. Paradoxically, this drive towards greater curriculum specialism (itself geared to greater examination proficiency at 16-plus) has led to more and more expected of middle school teachers at a time when falling rolls and education cuts have prevented them from meeting these demands.

An equally serious threat to the middle school's existence comes from the move to rationalize educational provision at 16-plus in order to protect curriculum choice at A level. Where this takes the form of separate sixth form colleges, few people in areas already containing 9 to 13 middle schools will countenance unavoidably small and unstable 13 to 16 schools where most pupils are either entrants or leavers. In these areas, middle schools (at least of the 9 to 13 variety) are therefore almost certain to disappear to make way for 11 to 16 schools.

Middle schools, then, may well prove to be casualties of policies geared towards the top end of the system. In effect, they are the places where a number of 16-plus pigeons are coming home to roost. While policies have been carefully worked out for the higher stages of the schooling system, middle schools have been left to muddle through as best they can when dealing with the consequences of those policies.

For many I.e.a.s, middle schools simply provided a cheap way of going comprehensive

Now although we are severely critical of the way that policies affecting middle schools are currently being shaped, we do not wish to imply that there was ever a "golden age" when policies were fashioned solely out of unadulterated idealism. In fact, the very existence of middle schools can also be explained in terms of administrative expediency - for many I.e.a.s, such schools simply provided a cheap way of going comprehensive by allowing existing buildings to be used efficiently.

There is a crucial difference, though, between the kind of expediency which accompanied the birth of middle schools, and that which has contributed to their present plight. In the 1960s and early 1970s, while many of the educational arguments for middle schools were developed as part of an elaborate exercise of justification, people did at least feel that the act of justification was itself important. Now, policy-makers do not even bother to invent reasons for changes of convenience that affect "residual" areas such as middle schools - they just wield the axe. Political and administrative authority, so it seems, is no longer deemed worthy of legitimization.

That said, while much of the blame for the middle school's predicament can be directed upward to politicians, administrators, or even, simply, "the system", middle school practitioners must also share part of the burden. They have not been the best of counsels for the defence. Even as their educational world has begun to collapse around them, they have tended to cling to a bankrupt stock of near-worthless justifications that have never adequately explained the realities of middle school life.

Neither the claim that middle schools catered for the unique needs of the "middle years child", nor the argument that such schools allowed a smooth transition to be effected between first and upper school experiences, were ever really convincing. The "middle years child" was little more than a psychological fiction, and the assertions about smooth transition jarred awkwardly with the reality of an abrupt break at 11-plus, the point where amounts of specialist teaching, setting and so on, rose sharply. The potentially "happy marriage" between primary and secondary traditions within the middle school too often turned out to be just an uneasy cohabitation of opposed practices and ideologies.

Middle school practitioners have usually ducked these important issues and retreated into a familiar repertoire of well-rehearsed but unhelpful justifications. This will no longer do. If the future of middle schools is to depend on more than just how the numbers happen to turn out, there will need to be a broad-based discussion about the nature and problems of middle schooling which takes into account existing research and an awareness of the diversity of present practice. An exercise of this kind might make several things possible.

First, it might enable assessments to be made of how far the middle school's difficulties are soluble or not. A number of schools, for instance, have tackled the problem of the sharp break at 11 by appointing "rotating" year leaders who move from year group to year group over a four-year period so as to gain an overview of the school as a whole. How widespread and successful are innovative practices of this kind and do they suggest that some of the problems which have plagued the middle school since its emergence might be manageable given time and a little organizational ingenuity?

A close assessment of the middle school may also lead to an appreciation that perhaps not all of the justifications that have been used to defend it are mere empty slogans. For instance, there is a strong case for arguing that middle schools have acted as significant catalysts of curriculum innovation, giving rise to a large number of projects specifically designed for children of the so-called "middle years".

In addition, middle schools are well suited to the collaboration of teaching effort and staff decision-making across subject boundaries - processes which would be much harder to coordinate in a large and conventional secondary school. Although that potential is not always fully realized, this is as much a result of the braking effects of the accountability and testing movement on the innovation process, as of any particular shortcomings of middle school teachers.

Part of the process of evaluating the middle school involves comparing it with other schools which educate pupils in the same age range. At present, these comparisons are rarely stated in any explicit way. They are more usually inferred through hints, insinuations and conjecture against an assumed backdrop of an allegedly virtuous 11 to 18 system. Close inquiry may reveal that such implied virtues are less than fully deserved.

On the question of pupil transfer and liaison between different stages of schooling, for instance, the reasons many secondary school teachers

opposed the introduction of middle schools was that in the 11 to 18 system, they could treat their entrants from the primary school as blank slates, on which they could engrave their patterns of specialism, however, with transfer as late as 13, no such assumption can afford to be made, and liaison must therefore be (though it is not always) much tighter.

The potentially 'happy marriage' between primary and secondary traditions within the middle school too often turned out to be just an uneasy cohabitation of opposed practice

In view of all these questions and uncertainties, the quiet, almost surreptitious unscrambling of middle schools systems that is going on in some areas should now be suspended, and the broadest possible debate about their strengths and limitations, as well as about the context of their operation, should be set in motion. That debate would be hastened and deepened by early publication of HMI's report on 9 to 13 middle schools, the work for which a survey of 49 middle schools was completed well over a year ago.

Whatever the findings of that report, we should not imagine that it will provide us with all the information we need. HMI reports are no substitute for carefully conducted research - their rather loose form of description do not allow the reader to check the data on which their descriptions are based, and therefore to assess its accuracy.

It is therefore not unreasonable to suggest that policy-makers might find it fruitful to draw on more than the views of the Inspectorate when making educational decisions. In short, they should have to demonstrate that their policies have been reasonably produced in full cognizance of relevant research. The schools have been asked often enough to demonstrate their accountability. It is now time to find out if I.e.a.s. and the DES are also up to the task.

Whether the outcome of this middle school debate will be one of support for or invalidation of the middle school concept in uncertain. The important point is that the judgement should not be made prematurely. And in all this, if anyone is to ensure that middle schools get a fair trial it should be the teachers. It is now time for them to cast away their old middle school defences and engage in an open and critical appraisal of their own practice and the context of that practice. Who knows that they may well prove to be their best defence of all.

Background to the middle school - see Briefing, page 9.

Andy Hargreaves lectures in the Department of Educational Studies at the University of Oxford, and Les Tickle lectures in the School of Education at the University of East Anglia. Their edited book, *Middle Schools: origins, ideology and practice*, is published by Harper and Row, 1980, £4.95 pp.

Teachers set for clash on 4% offer

by Richard Garner

A clash over teachers' pay this winter looks inevitable as local education authority leaders stressed the importance of sticking to a four per cent pay offer at the same time as teachers' leaders agreed to seek full cost-of-living pay increases.

The decision by the teachers' panel of the Burnham Committee, which negotiates teachers' pay, means that the teachers will line up behind local authority manual workers in seeking rises of about 12 per cent.

There was speculation by local authority leaders this week about whether Sir Keith Joseph, the Education Secretary, would be prepared to use Parliamentary powers to quash any higher award if both sides agreed to take the claim to arbitration.

The teachers agreed to couple their demand for increases in line with the rise in the retail price index with a request for independent machinery, which could feed comparisons with other people's pay into future negotiations.

Mr Fred Jarvis, general secretary of the National Union of Teachers, said: "We are going to have to say to local authorities that we will put concerted pressure on them if they stick to four per cent."

"That would be a substantial cut in the standard of living of our members."

Mr Terry Casey, general secretary of the National Association of Schoolmasters/Union of Women Teachers, stressed the need for all public service employees to join together "to fight to protect their living standards."

The teachers are planning to present their claim to the management panel at the next Burnham Committee meeting - which has been tentatively set for December 8.

The meeting has been called to discuss the London allowance for teachers stemming from this year's pay claim and the management's plan to abolish social priority area payments for teachers as from January 1.

Teachers' leaders have reaffirmed that they will reject the offer of 7.5 per cent increase in the bill for the London allowance being considered by local authorities - and stick out for rises of 13.6 per cent in line with the cost-of-living indices last April.

They are also to oppose the plan to abolish the social priority area allowance.

There was only one dissenting voice on the teachers' panel over the claim - that of the Professional Association of Teachers, whose members pledge never to go on strike. It urged the panel to put in for a 7.5 per cent increase and Mr Peter Dawson, its general secretary, warned that every teacher would be worried about his or her job if the claim was met in full.

Mr Alistair Lawton, leader of the management panel, said of the claim: "The short answer is no - it cannot be met. The government has laid down a four per cent increase for our wages bill and that's the figure we must stick by."

Local authority leaders are likely just to note the claim when it is presented on December 8 and leave negotiations until later.

If teachers win a 12 per cent award, it would mean an extra £558 a year for those on the bottom of the pay ladder bringing their salaries to £5,211 a year while the highest-paid headteachers would rise by £2,354 to £21,971. Those on the average salary (traditionally considered to be the maximum of scale two) would receive an extra £985 a year bringing their pay to £9,191.

If they only received four per cent, the average teacher would receive an extra £338 a year and a salary of £8,536 while those on the bottom of the pay ladder would receive £186 and a salary of £4,839.

Polytechnic graduates shun research

Polytechnic graduates are opting out of further academic studies and research and into vocational training. A statistical survey by the Committee of Directors of Polytechnics of last year's first degree graduates and higher diploma holders shows that jobs were harder to find than ever. Out of first degree graduates rose by 2.5 per cent over the previous year, to 19,500. But the numbers entering permanent or short-term employment fell by 9.8 per cent, leaving 11.8 per cent of the total out of work at the end of last year.

The number going on to further academic study or research fell by 23 per cent, while a fifth more decided to go in for vocational training. And 91 more decided to find their first job abroad.

Polytechnic graduates are now clearly seen to be affected by the economic climate and Government education policy, says the statisticians working party. They are also seen to be making intelligent responses. Among higher diploma holders, where output fell by 2.6 per cent to 4,100, the same trends were even more striking. The number opting for research or academic study plummeted from 352 to 107, while nearly a third more went into vocational training. The figure for those believed unemployed at the end of last year rose by more than half, to 9.3 per cent of the total.

There was a sharp drop in the number of education first degree graduates, where 470 fewer women graduates. Growth areas were science (up by 9.5 per cent), social studies (up by 7 per cent) and vocational studies, including architecture and town planning and art, where numbers rose by 17 per cent.

Once again, graduates from sandwich courses were more likely to have jobs than those from full-time courses. At the end of the year, only 9.8 per cent of sandwich graduates were still believed to be unemployed.

Colour limits to exchanges under fire

Delegates at an international conference in Edinburgh last week condemned school exchanges which were limited by the participants' race, religion or colour.

The International Federation of Organizations for School Correspondence and Exchange (FIOCES) heard of a school in the South-east of England which distributed a school exchange accommodation form asking parents whether they would accept a coloured boy or girl from a Continental school. A significant proportion of parents refused to accept such a guest.

FIOCES, which receives a regular grant from Unesco, exists to promote and coordinate school exchanges, and delegates came to Edinburgh from as far afield as Japan, Bangladesh, India, Morocco and the United States. Its president since 1975 has been Mr James Platt, director of the Central Bureau for Educational Visits and Exchanges in London.

Welcoming the delegates, Mr Alex Fletcher, Minister for Scottish Education, complimented the federation on its bridge-building especially between young people in west and east Europe. The congress decided to approach ministries of education in eastern Europe with proposals for school correspondence and exchange.

Mr Samuel, a well-respected member of the black community whose work was valued highly, said Mr Wiggan.

Mr Samuel said: "Many of the young people would be in the pool halls if they weren't coming here. We need a relaxed atmosphere with a lot of staff hours put in."

A spokesman at the ILEA denied this week that there was any racial discrimination. He said Mr Samuel was not automatically and legally entitled to a full-time post because the Burnham regulations did not cover the youth service. In some cases the Authority had extended the agreement to individuals in the youth service, but that was discretionary.

Schools Council could be vital in running of 16-plus

A reformed Schools Council could play a vital role in running the new 16 plus exams, the new leader of the 13 CSE boards, Mr Desmond Foster, said this week.

The GCE and CSE exam boards have so far denied the Council much of a say in the plans they are drawing up for the new exams. Though the Government has promised to consult the Council before approving these plans, the Council has not been given the job of coordinating and monitoring the new exams as Council staff would have liked.

As well as being the new chairman of the Standing Conference of Regional (CSE) Examination Boards, Mr Foster is also headmaster of Churchill School, Avon and a member of the Schools Council examinations committee.

He said after the national criteria on exam rules for the new exams had been jointly drawn up by the boards and approved by the Department of Education and Science, "There will be an urgent need for a body to ensure the standards are kept to and to settle any appeals on matters that have not been settled by any of the groups of boards."

The CSE boards have yet to discuss the Trenaman Report's suggestions for reforming the Council and its committees.

As well as being the new chairman of the Standing Conference of Regional (CSE) Examination Boards, Mr Foster is also headmaster of Churchill School, Avon and a member of the Schools Council examinations committee.

He said after the national criteria on exam rules for the new exams had been jointly drawn up by the boards and approved by the Department of Education and Science, "There will be an urgent need for a body to ensure the standards are kept to and to settle any appeals on matters that have not been settled by any of the groups of boards."

The CSE boards have yet to discuss the Trenaman Report's suggestions for reforming the Council and its committees.

Club staff race claim

Mr Paul Boateng, a black lawyer and vice-chairman of the ethnic minorities committee on the Greater London Council, was expected to meet members of an East London youth centre last night to hear their grievances.

The predominantly black members of the Clapton Youth Centre in Hackney claim that officers of the Inner London Education Authority are racially discriminating against workers at the centre.

They say that Mr Anselm Samuel, a part-time tutor-in-charge is being deprived of "conversion" to a full-time post which, they claim, he is legally entitled to, under new Burnham regulations.

And they claim that a new pay structure for the 10 recreational supervisors at the centre would virtually halve the pay of the unqualified - and usually black - staff.

Neville Wiggan, a senior member of the centre, told *The TES* this week: "Every way we look at the issues, we can see racial discrimination. And we are not getting any answers from the officers."

He said the club had previously been encouraged by the ILEA to take a flexible approach. The tutor in charge did a lot of community work rather than formal office and teaching work, which paid off by encouraging older black teenagers

who had been rejected by other clubs to attend the centre.

Mr Samuel was a well-respected member of the black community whose work was valued highly, said Mr Wiggan.

Mr Samuel said: "Many of the young people would be in the pool halls if they weren't coming here. We need a relaxed atmosphere with a lot of staff hours put in."

A spokesman at the ILEA denied this week that there was any racial discrimination. He said Mr Samuel was not automatically and legally entitled to a full-time post because the Burnham regulations did not cover the youth service. In some cases the Authority had extended the agreement to individuals in the youth service, but that was discretionary.

Mr Samuel said: "Many of the young people would be in the pool halls if they weren't coming here. We need a relaxed atmosphere with a lot of staff hours put in."

A spokesman at the ILEA denied this week that there was any racial discrimination. He said Mr Samuel was not automatically and legally entitled to a full-time post because the Burnham regulations did not cover the youth service. In some cases the Authority had extended the agreement to individuals in the youth service, but that was discretionary.

Mr Samuel said: "Many of the young people would be in the pool halls if they weren't coming here. We need a relaxed atmosphere with a lot of staff hours put in."

A spokesman at the ILEA denied this week that there was any racial discrimination. He said Mr Samuel was not automatically and legally entitled to a full-time post because the Burnham regulations did not cover the youth service. In some cases the Authority had extended the agreement to individuals in the youth service, but that was discretionary.

Mr Samuel said: "Many of the young people would be in the pool halls if they weren't coming here. We need a relaxed atmosphere with a lot of staff hours put in."



Paul Boateng

who had been rejected by other clubs to attend the centre.

Mr Samuel was a well-respected member of the black community whose work was valued highly, said Mr Wiggan.

Mr Samuel said: "Many of the young people would be in the pool halls if they weren't coming here. We need a relaxed atmosphere with a lot of staff hours put in."

A spokesman at the ILEA denied this week that there was any racial discrimination. He said Mr Samuel was not automatically and legally entitled to a full-time post because the Burnham regulations did not cover the youth service. In some cases the Authority had extended the agreement to individuals in the youth service, but that was discretionary.

Mr Samuel said: "Many of the young people would be in the pool halls if they weren't coming here. We need a relaxed atmosphere with a lot of staff hours put in."

A spokesman at the ILEA denied this week that there was any racial discrimination. He said Mr Samuel was not automatically and legally entitled to a full-time post because the Burnham regulations did not cover the youth service. In some cases the Authority had extended the agreement to individuals in the youth service, but that was discretionary.

Mr Samuel said: "Many of the young people would be in the pool halls if they weren't coming here. We need a relaxed atmosphere with a lot of staff hours put in."

A spokesman at the ILEA denied this week that there was any racial discrimination. He said Mr Samuel was not automatically and legally entitled to a full-time post because the Burnham regulations did not cover the youth service. In some cases the Authority had extended the agreement to individuals in the youth service, but that was discretionary.

Mr Samuel said: "Many of the young people would be in the pool halls if they weren't coming here. We need a relaxed atmosphere with a lot of staff hours put in."

A spokesman at the ILEA denied this week that there was any racial discrimination. He said Mr Samuel was not automatically and legally entitled to a full-time post because the Burnham regulations did not cover the youth service. In some cases the Authority had extended the agreement to individuals in the youth service, but that was discretionary.

Mr Samuel said: "Many of the young people would be in the pool halls if they weren't coming here. We need a relaxed atmosphere with a lot of staff hours put in."

A spokesman at the ILEA denied this week that there was any racial discrimination. He said Mr Samuel was not automatically and legally entitled to a full-time post because the Burnham regulations did not cover the youth service. In some cases the Authority had extended the agreement to individuals in the youth service, but that was discretionary.

Mr Samuel said: "Many of the young people would be in the pool halls if they weren't coming here. We need a relaxed atmosphere with a lot of staff hours put in."

A spokesman at the ILEA denied this week that there was any racial discrimination. He said Mr Samuel was not automatically and legally entitled to a full-time post because the Burnham regulations did not cover the youth service. In some cases the Authority had extended the agreement to individuals in the youth service, but that was discretionary.

Birth rate plea on heads' pay

Teachers' leaders are to press local education authorities to save head teachers from losing up to £15 a week from their pay packets because of the drop in the birth rate.

The 21,500-strong National Association of Head Teachers is worried that heads and their deputies who are currently paid on scales linked directly to the number of pupils in their schools could lose up to £15 a week with the drop of the number of pupils.

This is one of the issues which the teachers' panel of the Burnham Committee, which negotiates pay, will be seeking assurances on during next year's triennial review of teachers' pay scales.

In addition, they want an assurance that individual schools will not lose out on the opportunity of offering teachers' promotion because of a drop in roll.

The NAHT pressed the other teachers' organizations to fight to safeguard all salaries at a meeting of the teachers' panel of the Burnham Committee on Tuesday.

Mr David Hart, its general secretary, said: "Heads of long-established schools are already protected and they retain their salaries, even when pupil numbers fall."

"But heads and their deputies in schools which have been reorganized or opened since the mid-1970s do not have that automatic, mandatory safeguard."

"The head of a school opened, for example, in January 1977 and at that time expected to have up to 500 pupils could find, by next year, that he has a maximum of only 250. Under the present system, he would be paid as if he actually had 350 pupils in his school. But that would mean a drop in his maximum attainable salary from £12,129 to £11,388 - £741 a year less."

"If another head had started with a new school expected to have 350 pupils but which, by next year, has only a maximum of 150, he or she could face a salary cut of as much as £798 a year."

"Local authorities do at present have the power to use their discretion and retain heads' salaries at their previous level when pupil numbers fall. But in view of the present financial cuts our worry is that many authorities will be unwilling to use their discretionary power."

Mr Fred Jarvis, general secretary of the National Union of Teachers and leader of the teachers' panel, said that other teachers' organizations recognized the heads' dilemma.

Court says teacher can breast feed at school

A court in America has ruled in a test case that a teacher should be allowed to breast feed her baby on school premises.

Mrs Janice Dike, a Florida school teacher, will now be using the school authorities in Orange County for lost back pay after she was "compelled to take unpaid leave of absence for the remainder of the school term" to nurse her baby.

The school principal had cited a rule barring teachers from bringing their children to school. However, this rule has been enacted to avoid law-suits resulting from accidents to such children.

Mrs Dike asked to be allowed to continue breast-feeding at school during the lunch hour because her infant rejected artificial feeding. The school rejected her plea.

The school principal had cited a rule barring teachers from bringing their children to school. However, this rule has been enacted to avoid law-suits resulting from accidents to such children.

Mrs Dike asked to be allowed to continue breast-feeding at school during the lunch hour because her infant rejected artificial feeding. The school rejected her plea.

The school principal had cited a rule barring teachers from bringing their children to school. However, this rule has been enacted to avoid law-suits resulting from accidents to such children.

Mrs Dike asked to be allowed to continue breast-feeding at school during the lunch hour because her infant rejected artificial feeding. The school rejected her plea.

The school principal had cited a rule barring

'Good' staff could get more cash under local authority plans

New pay structure moves to reward the best teachers

by Sarah Bayliss

Radical proposals for rewarding "good" classroom teachers and for holding back incompetents under a new pay structure were explained out by an employers' leader this week.

Under the system, new teachers would not progress beyond their customary probationary year until they have been assessed as competent by the management panel of the Burnham committee, which negotiates pay.

Mr Lawton said this "entry grade" should probably last longer than the present probationary year.

"Once teachers get past that first barrier there should be a pretty good career structure ahead of them," he told a meeting of newspaper education correspondents.

Headteachers and possibly local authority advisory staff would have to be involved in assessing the competence of new entrants and the merits of those seeking a step up the pay ladder.

"I want to be able to reward the thoroughly first-class, professional teacher," said Mr Lawton who is vice-chairman of the Council of Local Education Authorities and a member of Kent county council. Recognition should be given to staff who contributed to school life in the widest sense, such as running clubs and extra activities.

The local authority associations were broadly agreed about the need for a pay structure that rewarded merit, but the special round of talks with the teacher unions on the matter were still at an early stage.

Turning to spending cuts, Mr Lawton said the pressure on authorities to make teachers redundant was "getting closer and closer." He was certain there would be increased pressure to close more schools in the next 12 months.

The rate support grant settlement might not be known until January, which increased the uncertainty local government faced. Mr Heseltine, the Environment Secretary, had warned the authorities that a seven per cent

cut might be necessary, given the degree of so-called overspending, but that would prove "very, very difficult."

In Kent, a seven per cent cut would mean a cut of 100 teachers' jobs. "It's going to be very difficult to face our electorate with that," said Mr Lawton.

The combined effect of spending cuts plus the proposed new legislation to curb rate rises mean that Conservatives' loyalty was "being stretched to its limit."

He warned that differences between Conservatives were growing and, on the Association of County Councils, the differences were "greater than I can ever remember."

● The controversial Local Government Finance Bill, which will make supplementary rate rises subject to approval by local referenda, had its first reading in the House of Commons last Friday.

In spite of vigorous opposition from the local authority associations and Tory backbenchers, the Bill has made no concessions and indeed is tougher than the original proposals published in a technical memorandum last month.

The Bill has not been made a temporary measure as was suggested by its critics and authorities must now hold the referenda in June, rather than in October.

Mr Jack Chambers, President of the NUT, called this week for "out-right opposition" to the Bill condemning it as "a massive attack on teachers' jobs, their working conditions and above all, on the education of the nation's children."

Speaking in Stoke-on-Trent, Staffordshire, he called on every NUT member to contact local councillors and MPs to ensure the Bill's defeat in Parliament.

Teachers in the London borough of Wandsworth are already organizing campaign meetings with parents and lobbies of MPs in protest at the Bill. They are particularly concerned about the effects on the Inner London Education Authority.

Headmistress rejects claims of privilege and power

Labour claims that independent schools are a source of privilege and power were dismissed as "rubbish" as far as girls' schools were concerned, by Mrs Heather Brigstocke, high mistress of St Paul's Girls' School, this week.

Giving her presidential address at the annual conference of the Girls' Schools' Association in London, she declared that girls' schools have throughout their history been integrated into the overall education system of this country.

"Now that politicians have arbitrarily separated the independent schools, we shall fight for independence, individuality, idiosyncrasy - education for women has always been meretricious in emphasis," she continued.

Headmistresses could be pessimistic about the role of women. Mrs Brigstocke said she had been called dominating when she had thought she was being authoritative. And it was irritating that careers advisors, when faced with two almost identical profiles showing strengths in modern languages, would suggest merchant banking or business for the man but a secretarial course for the woman.

But there was room for cautious optimism too. In the United States, getting on for half the personnel in their twenties on Wall Street were women appointed on equal terms with men and men and women were working together on an equal footing.

"Britain is a few years behind America - it sounds like a bad case of continental drift," she said.

In independent girls' schools, one of the most exciting developments was the "dramatic swing" to mathematics and physical sciences, she said.

A summary of the summer's results of 122 out of the 200 girls' schools in the association showed that there were nearly 20,000 candidates for maths and science O levels, 25 per cent of whom gained grade A and well over 30 per cent grade B.

"At A-level, out of a total of 15,500 there were, predictably, just over 2,000 candidates in English, but 1,800 (only 200 fewer) for mathematics, computer studies and statistics, 1,256 for chemistry and 1,005 for physics and physical sciences," she said.

Mrs Brigstocke also told her audience that these girls' schools should be pioneering flexible working arrangements. "The head of my art department is a husband and wife team, doing between them the equivalent of a full-time job: two women with young children could equally well share their job and the minding of their children," she stated.

But she warned that job-sharing was a concept not to be confused with a part-time job and part-time commitment, a lesson that many girls, and indeed many adult women, still need to learn."

74% rise in applicants for graduate course, but fewer places available

by Bert Lodge

Applications for the 1982 entry to the one-year teacher training course for graduates (PGCE) are up by a dramatic 74 per cent compared with this time last year.

Last week colleges and universities running the courses were ordered by Sir Keith Joseph, Education Secretary, to cut next year's intake by 20 per cent. This ended months of speculation about the severity of the expected cut after DES officials early in the year suggested 30 per cent of the target figure would be required.

In the summer the Government's Advisory Committee on the Supply and Education of Teachers modified this and recommended a cut of 25 per cent.

"Up to last Wednesday we had received 8,174 applications compared with 4,698 at this time in November last year," Miss Beryl Sowerbutts, director of the Central Register and Clearing House, said this week.

"It's not surprising in view of the general expectation there would be fewer places. We warned that early applications were advisable. By about after Christmas there will be no places left and the rate of applications will go right down."

The target figure set in 1977 was for an annual intake of just under 10,000 places. These courses became so popular that in 1980 institutions were allowed to admit almost 1000 extra students.

Sir Keith also ordered last week that colleges running three and four year BEd courses should not recruit more than they did this year or last. This would leave about 3,500 of the target figure of 9,000 places vacant.

Miss Sowerbutts said applications so far for BEd places were 7 per cent down compared with this time last year.

While polytechnics have received letters from the DES specifying by exactly how many they should reduce their PGCE places, university departments were still waiting for similar instructions from the University Grants Committee when The TES went to press.



Mortgaged for the sake of art

A part-time lecturer took a second mortgage out on his London home to pay for a national conference on the plight of art teaching all over the country which took place at Imperial College over the weekend.

Neil Bally, 30 - pictured above - managed to attract more than 600 people to the conference but still ended up £5,500 out of pocket as a result of it, despite raising £700 from contributions last weekend.

Mr Bally, who has taken out a £6,000 second mortgage on his flat, said in a paper drafted for the conference that cuts would be carried out "in the most vulnerable areas: the arts and the part-time staff/student system."

He added: "The results for art and design are disastrous since their schools employ up to 80 per cent part-time lecturers who are practising artists and designers."

In another paper to the conference, Mr Ken Baynes, head of the Design Education Unit at the Royal College of Art, warned of a "powerful sense of crisis" in vocational and professional education.

He added: "I regard the art and design component of further and higher education in Britain as being the best in the world. It is something which should be fostered and developed for itself and in the national interest. However, there is also a threat to art and design work in primary and secondary schools."

Mr Baynes said that art and design work should be related to "the crucial themes of the industrialized, urbanized world" and that should show "why their qualitative contribution is essential to balance the qualitative contribution of technology."

Poly and college control body machinery agreed

Local authority leaders and education ministers reached broad agreement on the structures and composition of the new body to oversee polytechnics and colleges at a meeting at the DES on Monday. Further details will now be worked out by officials.

The new machinery is to be called the Interim Committee for Local Authority Higher Education (ICLAHE). "Interim" was added by the DES, presumably to emphasize that the Government is still hoping to act on the proposals in the Green Paper to find an effective, long-term solution.

The Government's original plan set out in the Green Paper, was to "nationalize" the polytechnics by removing them from local authority control and placing them under a central body of Government appointments similar to the University Grants Committee. But this aroused such fury in local government circles that the incoming team of ministers had the opportunity to shelve it and to introduce interim proposals.

These are to set up a board of officials from the local authority associations, the DES, HMI and college principals to report to the main committee of local councils chaired by Mr William Waldegrave, under secretary for higher education. It now seems likely that the board of officials will include representatives from the Council for National Academic Awards (CNAA) to give advice on course approvals.

A substructure will be set up to advise the committee on financial and academic matters, but this is likely to consist of ad hoc groups rather than formal sub-committees. Their findings will be filtered by the official board.

Maths gains taken as read

Considerable improvements in the maths and reading of Norfolk primary children have been revealed by surveys carried out by the County Council.

Norfolk already had more above average seven and eight year old readers than the national average in 1976 when the surveys started. The 27.5 per cent scored 110 or above on the reading test compared to the national figure of 26.4. This year 34.6 per cent fell into this category, with a corresponding fall in the below average readers from 19.8 per cent in 1976 to 15.3 per cent in 1981, compared with a national average of 19.8 per cent.

The 10 to 11 age group made similar gains in reading; 31.8 per cent above average in 1981 compared with 27.8 per cent in 1976 and with a national standard of 26.4 per cent.

Norfolk began testing the mathematical ability of nine and ten year olds in 1978. Since then performance has risen from 52.6 per cent scoring average or above to 55.3 per cent. The national figure is 51.2 per cent. Those rated as poor (scoring 85 or below) fell from 12.2 per cent to 11.5 per cent compared with a national average of 15.2 per cent.

The tests were taken by virtually all the children in these age groups.

Mr Michael Edwards, the county's declared education officer, said these steady improvements were "quite clearly due to the very substantial efforts of the teaching force. As a general trend this is very reassuring."

Expenses tax claim bonanza

Thousands of teachers are to be urged to claim back any tax taken away from them by Inland Revenue on expenses for travelling to parent evenings and other voluntary duties.

All the teachers' organizations have agreed to advise their members to claim back any tax deducted for this during the past six years after last week's High Court ruling that Miss Ann Williamson, a Birmingham teacher, did not have to pay tax on £13 of expenses claimed as reimbursement for attending parents' evenings over two years.

The move was agreed at a meeting of the teachers' panel of CLEA schoolteachers' committee on Monday afternoon.

Mr Doug McAvo, deputy general secretary of the National Union of Teachers and secretary to the teachers' panel, said: "It is impossible to establish the number of teachers affected because it would depend on a local decision taken by tax offices as to whether money had been deducted."

Meanwhile, teachers' leaders have also agreed to go into dispute with the local education authorities over the way they have used the procedures for solving grievances between the two sides. They claim that too often in the past - as was the case when the children in these age groups.

Mr Michael Edwards, the county's declared education officer, said these steady improvements were "quite clearly due to the very substantial efforts of the teaching force. As a general trend this is very reassuring."

Aid plea for parents on Down's babies

MENCAP, the Royal Society for Mentally Handicapped Children and Adults, is concerned at the one-sided view of Down's Syndrome children presented during the recent trial of Dr Leonard Arthur who was acquitted last week.

Mr Brian Rix, MENCAP's director, said it was a traumatic experience for any couple to have a mentally handicapped baby and none would pretend it is an easy task to bring one up. "Nevertheless, a large number of parents do cope and it would be foolish to underestimate the love, affection and joy in the relationship between many parents and their Down's Syndrome children."

He called for better services for the mentally handicapped to help parents and for more research into the causes of mental handicap.

Reach down and reactivate "payment by results" from its 90-year-old shelf of shame and the suicide rate among teachers would go up. (It did at the time.)

So would Cyril Mapley's salary - because so many of his pupils not only get their A levels in engineering drawing but get them in their fifth year, only three years after first picking up a T-square and when most pupils at that age are still doing O levels.

His results this summer at Tunbridge Wells Boys' Technical High School were:

(A level) 5th year 49 passed out of 53 entered Lower sixth 8 passed out of 8 entered (O level) 4th year 40 passed out of 46 entered 5th year (overall) 73 passed out of 81 entered

Cyril Mapley boasts a vulgarism he resorts to quite a bit, though not usually that he gets boys through A levels in one-sixth of the time most candidates take to get there.

How does he do it, this 58-year-old ex-torpedo fitter who only got into teaching because in 1945 he was letting in anybody who'd got his knees brown in the Western Desert or his bell-bottoms mildewed in the Western Approaches?

First, a look at what could be called the extra-Mapley factors which could cut him down to size:

A high quality catchment area

This part of the south-east certainly has more white than blue-collar families. It also has a public school, Tunbridge, and for the 25 per cent of selected 11-year-olds, three grammar schools to choose from before they get round to a technical high school. "They are very much creamed off before they come here," one member of staff remarked.

Only pupils likely to pass are entered

A favourite play of the private coach when accepting pupils, this is one in a way of Cyril Mapley: for once all pupils have completed their compulsory year of the subject in the third year, those who then opt for it are all ticked "likely to pass" to boost their confidence.

Individual or small-group tuition

Not likely here. Not with more than 270 pupils a week and the staff consisting of Mr Mapley plus a third. Generous allotment of time to the subject

One double period a week in the third year and two in the fourth and fifth years. "About average for the subject," a county inspector judged this week.

The traditions or ethos of the school

likely to make a difference, this. It seems a hard-working place. Other subjects are also tackled with some panache. The maths department, for instance, puts them in for O level in the fourth year and has had only one failure in the past four years.

Other suggestions such as superior equipment or workshop, he dismisses. "I don't believe in fancy tackling like adjustable tilt desks. They're a waste of money."

So what's left?

Only Cyril, the teacher. Except he is a lot more than that. It's his boast (again) that he has already done three or four jobs (tell it not in County Hall). Tonight, being a Friday, he will be out in his white tux doing a gig in one of the village halls around Tunbridge Wells where dances are so popular in the weeks before Christmas.

He will be out on another tomorrow night, though his band has shrunk from six to two-piece now, Cyril on the electronic organ plus wife Glenys. "Kent's loveliest tri drummer" according to the publicity hand-out, written by her gallant husband.

He has worked as hotel entertainment manager, toast master, one-man cabaret turn, master of ceremonies, and he sold sewing machines - as many as a thousand he claims. Then there is a hint of a "building concern."

All right, doing three or four jobs may speak of no more than energy - or even greed. But for teaching, two of them are significant - entertaining and selling. Who can say the trade does not require a fair bit of both?

Cyril Mapley is one of nature's winners. Their egos are never hurt anybody not listening; they are good at making them listen. A switch of mood, a change of pace, a piece of audacity and the wandering



Ex-torpedo fitter Cyril Mapley has an astounding record in propelling A level pupils to success

Diary of a no nonsense super teacher

Left: Cyril Mapley... success at his finger tips

attender is grabbed back again. If that does not work, he plays the heavy though a smile seems to lurk at each corner of the wide, tolerant mouth as he slips into the Wackford Squeakers role.

"I believe in discipline. And corporal punishment." So how does he punish the odd one even the guile of stagecraft has failed to correct? The answer is "No comment," and a wink at whoever happens to be nearest.

"Look round my workroom, you'll see no graffiti. There's no 'Chelsea rules OK' here. They know Cyril rules. They know I'd thump 'em if they stepped out of line. And I don't allow any football scarves in here."

That is the hammed-up crude persona. His other discipline is the other that teachers are told about in training: hard work and plenty of it, though Cyril Mapley sets nothing so dreary as homework. It's called "leisure pleasure" and they have all the leisure of a full week to do it in.

"That way there is no excuse for it not being done and I accept none: especially as I run a dinner-time class three times a week. (Why not? I love teaching). I don't let anybody get behind. Another thing I insist on is every piece of homework being signed by the parent. Gets them involved."

Cyril Mapley says that he first pushed pupils towards A levels to force respect for a subject vital to the country's prosperity, but which the academic establishment looked down its nose at.

Cyril Mapley agrees with enthusiasm. "The profession needs this kind of boost. Twenty per cent of its members should be got rid of, anyway. Look at what they don't achieve in some subjects - like modern languages, for instance. I'd like to build up one personality in the country as a super teacher."

Auditions, did somebody say? Cyril sees no need.

The old trouper knew he had stumbled upon a good act. He confesses to disappointment at the school's response. "When Thames TV came down to film me they weren't even allowed in the building. And when the BBC wanted me on *Nationwide*, I needed an hour off. It was refused. That hurt. I've done hundreds of hours of free overtime - just on bus duties - for this school."

"It wasn't for me I wanted the time off. It was for the school."

It would certainly have done no harm to an institution which may well be affected by reorganization in a year or two. But why is this backing away from good publicity still found in the profession? Professor Ted Wragg (no mean showman himself) of Exeter University, told a conference only last month that teachers were far too modest. "Don't be afraid to show your skills. Open up your classroom," he said.

Cyril Mapley agrees with enthusiasm. "The profession needs this kind of boost. Twenty per cent of its members should be got rid of, anyway. Look at what they don't achieve in some subjects - like modern languages, for instance. I'd like to build up one personality in the country as a super teacher."

Auditions, did somebody say? Cyril sees no need.

Bert Lodge

Why Care About Animals?

Unfortunately, animals are often badly treated. This can be because people don't think, or don't even care what they are doing to them. Animals give humans a lot; humans should make sure they give something in return.

Animals share your world. Without them this planet could not exist as you now know it. Animals are used in lots of ways. Some of them work for you and many are your companions and friends.

If you would like your pupils to learn more about the animals in Britain and other countries, why not help them to become Junior Members of the RSPCA: the oldest and one of the largest Animal Welfare Societies in the world?

Anyone aged up to 17 years old can become an RSPCA Junior Member and join the thousands of other young people all over the British Isles who are

concerned about the welfare of animals.

RSPCA Junior Members can take part in activities, do projects, puzzles and competitions, and, of course, write in with any ideas, stories or photographs. These might be published in the magazine.



They will receive a badge, Membership card and the Junior Magazine which comes out four times a year.

Teachers forming a group will receive a pack giving ideas for activities and a regular newsletter. They will also be entitled to make use of the facilities offered by the Education Department including the opportunity to borrow films and slide sets produced by the RSPCA.



Caring for Animals is not enough. Help us to look after them.



For further information please complete coupon and return with s.a.e. to: RSPCA Junior Membership, Education Department, Causeway, Horsham, Sussex RH12 1HG.

Name: _____
Address: _____

Fees blow to adult education

by Diane Spencer

High fees are killing off adult education, the lecturers' union, Natfhe, concludes after conducting a nationwide survey of colleges and adult education centres.

There is little sign of any let-up in the steady erosion of adult education resulting from government cuts in local authority expenditure, it says. Out of 92 replies, 85 per cent reported an increase in non-vocational and vocational course fees for 1981-2. In Devon vocational course fees more than doubled at Pilton community college and rose by 60 per cent for all courses at Okehampton community college.

Okehampton reported a drop of 180 students this year and a closure of three courses - pottery, dressmaking and intermediate French. Barking college of adult education suffered a 25 per cent drop in enrolments and 40 courses were lost.

Clacton AEC closed 23 classes and lost 266 students. South Bristol technical college lost 552 students and two vocational and 24 non-vocational courses were closed.

Bridgend college of technology expects a fall of 10 to 15 per cent because it suspects that fees for O and A level courses are reaching prohibitively high limits.

Tighter restrictions on minimum numbers for courses now in operation are especially difficult to meet in sparsely populated areas like parts of Devon. A "socially tragic" effect, says Natfhe, has been the reduction in concessionary fees for pensioners and the unemployed.

Pilton community college had to reduce its concessions from 50 per cent of fees to 20; Accrington and Rossendale college said that a charge of 25 pence an hour to all under 18s taking non-vocational classes had wiped out six classes including wood and metalwork.

The union is also worried about the loss of part-time jobs and cuts in teaching hours. South Bristol technical college reported a 22 per cent reduction in part-time hours; High Peak college, Buxton, 50 per cent and Crickeadale College, Andover, has lost part-time tutors.

Many colleges are engaged in "some sort of juggling act", trying to stop the brunt of cuts falling on fees by reducing the length of courses.

At Central Portsmouth centre, Hampshire, classes now run for one hour instead of one and a half. Fareham technical college, Hampshire, reports an "insidious and continuing decrease in periods of learning."

In contrast, Nottinghamshire is expecting a substantial increase in student numbers following a drastic reduction in fees (73p to 37p an hour for non-vocational courses at North Nottingham College). In the West Midlands, Wolverhampton Polytechnic and Hall Green technical college now have more unemployed students following a remission in fees.

Community homes policy under fire

Local authorities are using "shallow, unjustified and spurious arguments" to avoid placing children in community homes, it was claimed this week.

Mr Graham Smith, general secretary of the Association of Community Homes, criticised authorities who used the philosophical argument that children should be treated in the community when their real motive was to save money.

Sacked teacher's complaint upheld

by Bert Lodge

An education authority acted wrongly in refusing to re-employ a teacher, the chairman of an industrial tribunal has ruled.

Lancashire county council had applied to have the case re-listed so that compensation could be determined for the sacked employee, Miss Thelma Davies, former deputy head of Tawd Vale secondary school, Skelmersdale. But in view of the fact that the order of the tribunal last year was not that Miss Davies should be compensated but another job found for her, Mr L. A. Brown, chairman of Liverpool industrial tribunal, adjourned the application *sine die*.

Negotiations should continue he ruled, so that at least the spirit if not the letter of the tribunal's order could be complied with.

Miss Davies, then 41 years old, was dismissed in 1978 for refusing to submit to a medical examination (The TES, June 20, 1980). She had insisted that her own doctor should be present and that the authority satisfy her in writing why she should be examined. When she brought the complaint of unfair dismissal the tribunal found that the Tory-controlled authority had justified the request for a medical by referring to regulations which did not apply to a reg-

ularly working teacher but only to one who had been off sick for a long time.

The tribunal was very critical that somebody in the education office without medical qualifications should determine the "need" for not merely a medical but a psychiatric examination as well.

While upholding the complaint of Miss Davies, the tribunal did not order her reinstatement at Tawd Vale in view of the poor state of relationships in the staff room. Instead the authority was ordered to find her another job, that is, a group 10 deputy headship.

The county refused to do this (there is no legal compulsion) but offered to pay compensation.

Mr Joe Heaslip, NUT regional official, said this week that with a change in the political complexion of the employing authority it had been hoped a fresh look would be taken at the case.

Mr Fred Jarvis, NUT general secretary, commented, "The union would expect a public employer to take special steps to redress the wrong done to an employee found to be unfairly dismissed by an industrial tribunal."

O level results could be linked to school transfers, Wirral study says

by Bob Doe

Pupils from middle school who transfer to comprehensives at 12 or 13 pass fewer O levels than children transferring at 11, to grammar schools and secondary modern, new research suggests.

Research by Dr Ken Bryan and Dr Alan Digby of Chester College of Higher Education revealed a difference on average of nearly half an O level per pupil between those transferring at 11 to grammar and secondary modern schools and those transferring at 12 or 13.

Revealing their findings at a meeting of the Middle Schools Research Group in Chester this week they did not name the authority concerned but it is known to be Wirral.

Wirral has decided to close all its middle schools but the decision was well before the results of this research were made known to the authority.

In those parts of Wirral that still

have grammar and secondary modern schools and transfer at 11, the average number of O levels (and CSE grade one) passes in 1980 for all pupils entered was 4.4 compared with 3.1 and 3.3 where there are eight to twelve and nine to thirteen schools followed by comprehensives.

But this difference of more than one O level pass makes no allowance for the differences in the social make-up of the two areas or in the basic abilities of pupils in them. When these averages were adjusted statistically to take account of the apparent effects of social background the attainment at 11, the averages were 4.0 for those transferring at 11, 3.7 at 12 and 3.5 at 13.

With a sample of only 4.5 per cent (217) of those entering public exams in Wirral in 1980, these differences are not large enough for the researchers to be reasonably confident they did not occur by chance. Statistically, there is more than one chance in 20

that these differences are a purely random finding.

Dr Bryan said, "Our findings need to be treated with caution."

The differences observed in this research could in fact have little or nothing to do with middle schools since they are based on outcomes five to seven years after transfer to a variety of selective and non-selective schools. These results could serve just as well (or badly) as a comparison of teaching in selective versus non-selective secondary schools.

In the Wirral grammar school the average number of passes was 6.4 while in the secondary moderns it was only 2.6. Even after the apparent advantages of social class and ability were allowed for the grammar schools adjusted average was 5.2 passes to the secondary modern's 3.0, though comparisons based on these sorts of sub-divisions are based on even smaller samples.

Catholics and Protestants to merge colleges

Amalgamation of Belfast's Catholic and mainly Protestant state-run teacher training colleges appears to be certain.

The move has been recommended in the Chivers Report on teacher training in Northern Ireland, and the Ulster minister responsible for education, Mr Nicholas Scott, says he is accepting the proposals.

The Catholic Church authorities have already voiced opposition, however, and Mr Scott must discuss the issue with all involved.

The report recommends that the Catholic colleges, St Mary's and St Joseph's, should be amalgamated with Queens University, Belfast, and Stranmillis College on a common site currently occupied by Stranmillis alone.

The plans should be in operation for the 1983/84 academic year.



Smithies poised to gain his union spurs

Mr Fred Smithies, the 52-year-old second in command of Britain's second largest teachers' union, is set to step into his master's shoes as his union's general secretary.

The announcement this week that Mr Smithies has been chosen as the new general secretary designate of the National Association of Schoolmasters/Union of Women Teachers, by the union's executive, has not come as a major surprise.

He has been the favoured son for the job and is to work in tandem for a year with Mr Terry Casey, the union's retiring general secretary, assuming that his appointment is ratified - as expected - by the union's annual conference next Easter.

However, there is no doubt that the 125,000-strong union will be in for a change in style from the robust leadership of Terry Casey, who was never afraid to shoot from the hip, to the more considered approach which has been Fred Smithies' hallmark since the 1960s.

As one colleague from another union put it: "The NAS/UTW has been run very much as if it has been controlled by a rodeo rider in the past but that may have been because the leader previously had such sharp spurs."

"As anyone will tell you, there is a pretty intense and friendly trade union mafia among the major teachers' organizations and - within that mafia - I can say I have never heard anything complimentary said about Fred Smithies."

Fred Smithies is a classroom teacher who took to teacher unionism after a long spell at the chalk-

board in process. The two unions did, after all, meet under the auspices of the TUC earlier this year in an attempt to bury the hatchet - although public bickering broke out again at the TUC conference over a change in the composition of the TUC's general council which would have given the NAS/UTW a seat on it for the first time.

Mr David Hart, the general secretary of the National Association of Head Teachers, said: "So far as we are concerned we have always had a good working relationship with Terry Casey and the NAS/UTW but I would hope that we might see less of the anti-head bias that we have seen of late. Now we have a new general secretary, perhaps the NAS/UTW will see that heads do have a management function to perform and that it is a unique function in education."

Fred Smithies is married and lives in Guisborough in Northamptonshire, which is equidistant between Rednal, in Worcestershire, where the union's education centre is, and London, where it has its headquarters. Epithets like "a little stoic" and "the type of person who likes to think carefully before uttering anything" have been used by other teachers' leaders to describe him.

With that reputation, it is perhaps ironic that - at a time when he is about to take over from a well-known and well-liked leader - he should be at present in Dallas, Texas, on a two-week holiday planned long before the leadership struggle.

Richard Garner, director of the University of Keele department of education for three years, said: "Dr John Barry Cook, headmaster of Christ College, Brecon, has been appointed headmaster of Epsom College from next September in succession to Mr Owen Rowe, who is retiring."

Mr Charles Sweeten, director of computing at Oundle School, has been appointed director of the Independent Schools' Microelectronics Centre, which is being established at Westminster College, Oxford, and will start operating next April.

Mr Stuart Machure, editor of The TES and Mr J. R. G. Tomlinson, director of Education for Cheshire County Council and chairman of the Schools Council, have been appointed honorary professors of the



Lady Plowden

Transfer at 11: doubts from Plowden

The Plowden Report questioned whether there was anything much to be gained by transfer at age 11 in terms of child development.

The original intention of transfer at that age was to give scholarship winners the benefit of the already established five-year secondary course and to provide a reasonable period of secondary education for all when the leaving age was 14.

"The changes of curriculum and method associated with a break at 11 across a phase in learning and attitudes to it," Plowden claimed.

"An unconscious period of art, dramatic movement and writing, for example may last until 12 or 13."

"Many children at the top of the primary school develop confidence in writing, experiments, and using books a specific situation often unrelated to subjects. Their progress may be slowed down by premature emphasis on class instruction, adult systematization and precision in secondary schools."

Plowden's stages of development were invoked and the science, maths and foreign language teaching finding his way into the juniors were said to provide a basis for a middle school curriculum.

period of semi-specialist teaching could bridge the gap between the class-based teaching of the primary and the subject-based teaching of the secondary school. It would also provide more demanding work for the 9 and 10-year-olds, the Plowden Report argued.

The arguments in favour of a break at 12 rather than 13 were that it still allowed four years preparation in the upper school for exam work. Transfer at 13, on the other hand, meant early leavers would only have two years and two terms in the upper school.

Much more specialist science, handicraft, PE and language teaching would have to be provided in a nine- to 13 school and the influence of cases on them would be much greater. Nine to 13 middle schools might have been primary schools, Plowden warned.

In the event, the variety of transfer ages even within single education authorities and encroachment on what was formerly secondary teaching caused a number of difficulties. In the absence of careful liaison between upper and middle schools and some agreement on what should be taught and by whom, upper schools often complained of intakes poorly or unevenly prepared for secondary schooling.

It is alleged that one middle school taught German though the upper school did only French.

The minority position of middle schools (only one pupil in 15 is in a 'middle school') also had implications for the curriculum development and, although the Schools Council middle schools of schooling project made the point that middle schooling did not have to take place in middle schools.

No single association or centre emerged as a focus, or pressure group for the middle school experiment.

Middle schools decline due to haphazard development

More than 500,000 children are in schools that were little more than a by-product of the reorganisation of secondary education. Though psychological and educational justifications were produced for the middle school, in most cases the reason for their creation was that they allowed the viable comprehensive schools to be established and the school leaving age to be raised to 16 with the minimum of new building.

This was true even of the first middle schools ever built in pioneering areas such as the West Riding of Yorkshire. The then chief education officer, Sir Alec Clegg, was keen to extend the approach of the primary school to older pupils but the plans he submitted to the then Conservative government in 1963 were conceived to enable comprehensives to be set up.

But first the law had to be changed. The 1944 Education Act specified 11 as the age for secondary transfer largely because of the unquestioned assumptions of the pre-war Hadow report.

Realising that without either some flexibility in transfer ages or a massive rebuilding programme comprehensives would not be feasible for many years to come, the Labour Government's "invitation" to local councils to submit comprehensive plans (circular 10/65) mentioned middle schools as one of six different possibilities.

That circular is seen by many as more significant in the genesis of middle schools than the Plowden Report which followed two years later.

That report recommended government action to establish a national system of eight to 12 middle school, but this was never accepted by that or any other government.

The result has been that middle schools have developed in a piecemeal and haphazard fashion wherever they fitted local circumstances.

In some areas the Plowden eight to 12 model, often based on former junior schools, was followed. In others the Clegg nine to 13 schemes fitted better, sometimes utilising for-

briefing

MIDDLE SCHOOLS

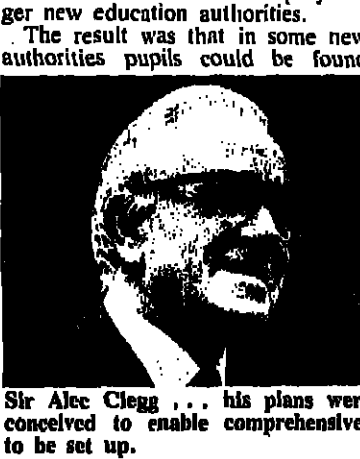
former secondary moderns while large form entry, but still modest sized, high schools provided the third tier. In some cases the five to seven first and eight to 12 middle schools were amalgamated into combined first and middle schools.

Though the law had been changed to allow transfer at ages other than eleven, schools still had to be primary or secondary. So the new middle schools had to be designated one or the other.

Eight to 12 schools were "deemed" primary and the few 10 to 13 schools secondary. Local authorities could choose which to "deem" nine to 13 schools, primary designation carrying with it disadvantages for staffing and capitation.

The mixture of teacher styles, curriculum and ages of transfer created nationally was then given a further twist in 1974 when local councils were reorganized. Many former education authorities were swallowed up by larger new education authorities.

The result was that in some new authorities pupils could be found



Sir Alec Clegg... his plans were conceived to enable comprehensives to be set up.

Milestones on the road...

1926 Hadow Report recommends break in elementary schooling at 11.

1944 Education Act establishes secondary education for all starting at age 11.

1947 School leaving age raised to 15.

1957 Leicestershire reorganized into 5 to 11, 11 to 14 and 14 to 18 schools.

1963 Plowden Committee set up.

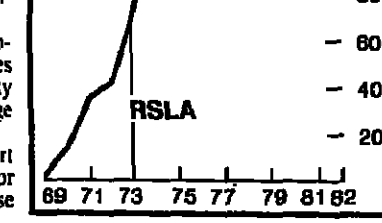
West Riding submits plans for 5 to 9, 9 to 13, 13 to 18 schools in Wakefield rapidly followed by middle school schemes for Hull, Bradford and Walsley.

1964 Law amended to allow transfer ages other than 11.

1965 DES Circular 10/65 issued in which middle schools are suggested as only one of six different ways of setting up comprehensives.

1966 DES architects issue first guidance on building middle schools.

1967 Plowden Report recommends Government action to establish national nursery, five to seven, eight to 12 and 13 to 18 system.



*The table includes first and middle schools from unpublished information by the DES. The latest figure is for January 1981 (1980). Figures for 1969 to 1982 are from CIPFA estimates.

1973 School leaving age raised to 16.

1974 Reorganization local government mixes up three tier and two tier systems.

Middle school numbers double.

1976 Peak in pupil numbers reached.

1981 First large scale middle school closures began.

Staff ratios similar to primaries

Middle schools are staffed more like primary schools than secondary schools. That is generally true regardless of whether they have been deemed primary or secondary.

In primary schools in England (middle schools are with minor exceptions an English phenomenon in the UK), there are on average 22.5 pupils for every teacher. In secondary schools the average is 16.4.

As the accompanying table shows, some middle schools have pupil-teacher ratios that are worse than the primary average.

This lends some credence to those who argue the middle school has not been able to show what it is capable of because it has never been staffed well enough.

The pupil-teacher ratios of middle schools deemed secondary (20.3) are not, on average, much better than those deemed primary (21.6).

Middle schools have attracted more graduates than primary schools.

About 13 per cent of all primary teachers have a degree, 16 per cent in the juniors. In middle schools deemed primary, the proportion is 21 per cent and in middle schools deemed secondary 26 per cent.

Some 48 per cent of secondary teachers are graduates.

Comparison needed for two systems

So far no systematic appraisal of the value of the three-tiered compared with the two-tiered system has been published.

A national survey of 800 middle schools by Mervyn Taylor and Yvonne Garson of Keele University concluded they were not staffed or equipped well enough to achieve the transition to a specialist curriculum; eight to 12 schools remained essentially primary schools in outlook and curriculum; nine to 13 schools had more specialists but were too understaffed to make proper use of them and that middle schools lacked the resources to maintain the required links with upper schools.

The former Chief HM Inspector for primary and middle schools, Mr John Burrows, published a book, *Middle Schools: High Road or Dead End?* In it he said they were cheerful friendly places where children were treated as people. Work of the highest quality and "astonishing" variety could be seen in the best of them, but did not elaborate on how many, or how far behind the rest were.

HM Inspectors are now writing up the results of a survey they began in 1977. It is based up on formal inspections carried out in 48 established nine to 13 schools across the country.

- ### KEY SOURCES
- Children and their primary schools: A report from the Central Advisory Council for Education (The Plowden Report) HMSO 1967.
 - The Social Significance of Middle Schools by Alan Blyth and Ray Derricott published Batsford London 1977.
 - Middle Schools: origins, ideology and practice edited by Andy Hargreaves and Les Tickle, published Harper and Row, London 1980.

THE MEDIA IN A DEMOCRACY
CITY UNIVERSITY, LONDON
January 6, 7 and 8, 1982

The Lord Mayor of London, Jeremy Isaacs, Roy Shaw, Jonathan Dimbleby, Mary Whitehouse, are among those taking part in the CEWC Annual Conference for senior pupils (15+).

CIVIC RECEPTION, FILMS, DISCO, DISCUSSION ETC.
Programme and application forms from CEWC,
26 Blackfriars Lane, London EC4,
01-236 0348

People

Mrs Hilary Heister is to direct a new Schools Council project, Language in the Multicultural Primary Classroom from next January until December 1984. She will be assisted by Mrs Carolyn Steedman who is at present head of the English language department at Cashmore Middle School, Warwickshire. The project will be based at the London Institute of Education.

Mrs Margaret Bate is the new Head of Salisbury Road Infants School, Plymouth. She was previously Deputy Head at Ivybridge Infants School.

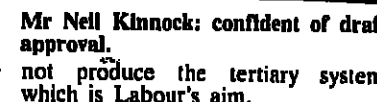
Mr Stuart Machure, editor of The TES and Mr J. R. G. Tomlinson, director of Education for Cheshire County Council and chairman of the Schools Council, have been appointed honorary professors of the

Local Education Authorities with Middle Schools, 1981-82	Middle Schools Deemed Primary number	Middle Schools Deemed Secondary number	Middle Pupil as % of All Pupils aged 5-15
London	33	20.4	27.4
Eding	22	21.4	37.6
Harrow	-	-	38.1
Metropolitan	-	16	19.8
Derbyshire	14	22.0	19.1
Birmingham	22	22.1	2.0
Bradford	24	20.6	24.4
Doncaster	28	22.2	19.0
Douglas	7	22.3	22.2
Kirkcaldy	33	20.1	11.1
Leeds	-	-	25.6
Newcastle	-	-	11.2
North Tyneside	-	-	18.4
Rochdale	-	-	18.1
Sheffield	11	22.7	13.8
Walsall	-	-	20.6
Wigan	-	-	18.9
Wirral	23	22.7	10
Cumbria	-	-	10
England & Wales	-	-	20.4
Bedfordshire	17	22.9	6.6
Berkshire	72	-	-
Buckinghamshire	1	-	-
Cambridgeshire	12	18.3	1.7
Cheshire	-	-	21.9
Devon	11	21.3	0.8
Dorset	11	24.0	18.7
E. Sussex	25	20.7	20.6
Gloucestershire	81	22.3	1.2
Hamshire	-	-	11.9
Hereford & Worcester	7	20.5	21.8
Hertfordshire	-	-	19.6
Humberdale	19	20.9	18.9
Humberside	-	-	20.7
Ile of Wight	-	-	20.6
Kent	12	24.4	4.8
Lincolnshire	62	21.1	14.8
Norfolk	-	-	21.2
Northamptonshire	-	-	47
Northumbria	-	-	20.5
North Yorkshire	-	-	20.7
Nottinghamshire	-	-	0.6
Oxfordshire	-	-	18.4
Shropshire	-	-	19.0
Somerset	35	23.2	22.1
Staffordshire	-	-	20.1
Suffolk	120	21.5	19.8
Surrey	59	21.4	21.8
Wiltshire	17	22.4	16.5
Wiltshire	-	-	17.4
TOTAL	788	(21.6)	22.3

PTB: pupil teacher ratio, full-time equivalent
Source: Education Statistics 1981-82, Education, CIPFA, September 1981 pp. 6-21. PTB in brackets applies only to 718 schools which provided information.
*Information not available.

Edited by Mark Jackson

The course examines issues pertinent to the physical education curriculum and offers the opportunity to specialise in either the scientific or the arts aspects of human movement studies. Further particulars and forms from: The Registrar, Bedford College of Higher Education, Lansdowns Road, Bedford MK40 2BZ.



education councils, which - unlike the older City and Guilds' Institute and the Royal Society of Arts, who are examining bodies and might be able to work under a new central council - are themselves validators.

countries in engineering are not for them and that they should therefore keep up essential subjects like mathematics," said a spokesman for the commission.

"There is as much need for direct support within further education as there is in schools, yet the programme

The course examines issues pertinent to the physical education curriculum and offers the opportunity to specialise in either the scientific or the arts aspects of human movement studies. Further particulars and forms from: The Registrar, Bedford College of Higher Education, Lansdowns Road, Bedford MK40 2BZ.

THE TIMES Educational Supplement

Important news for New Subscribers.

The surest most convenient way to get your own copy of the TES each week is to take out a subscription. Simply refer to the rates below and then complete the coupon and send it together with your cheque for the correct amount to the address shown. Our computerised subscription department will provide you quickly and regularly with your weekly copy.

NEW SUBSCRIPTION RATES

The following postal zones are listed for your convenience. If your country is not included, please contact your local postal authority to ascertain your correct zone as specified by the British Post Office.

United Kingdom only by surface mail.

6 months (26 issues) £13.75

12 months (52 issues) £27.50

British Postal Zone 'A' including Algeria, Egypt,

Saudi Arabia and United Arab Emirates.

6 months (26 issues) £29.38

12 months (52 issues) £58.76

British Postal Zone 'B' including Argentina, Bermuda,

Brazil, Hong Kong, India, Jamaica, Kenya, Malaysia,

Mexico, Nigeria, Pakistan, Singapore, South Africa,

Trinidad and Tobago, Zambia, Zimbabwe.

6 months (26 issues) £34.84

12 months (52 issues) £69.68

British Postal Zone 'C' including Australia, China,

Japan, New Zealand, Papua New Guinea, Philippines,

Taiwan.

6 months (26 issues) £39.78

12 months (52 issues) £79.56

Europe including Cyprus, Gibraltar, Malta.

6 months (26 issues) £21.58

12 months (52 issues) £43.16

By Air Freight, USA and Canada only

\$75.00 (US dollars only) per annum.

Please send me *The Times Educational Supplement*

☐ 6 months ☐ 12 months

Please print

NAME

ADDRESS

I enclose my cheque for made payable to Times Newspapers Ltd

Signature

Date

Return this coupon to Times Newspapers Ltd, Supplements Subscription Manager, Oakfield House, 35 Perymount Road, Haywards Heath, West Sussex RH16 3DH.

Poland / Vera Rich

Strikes delay teacher charter

WARSAW: Poland's teachers and ancillary educational workers, including those in the school library and child guidance services, have launched a major protest campaign, involving strikes throughout the country.

They were protesting against an attempt by the Government to rush the new "Teachers' Charter of Rights and Duties" through the Sejm (the Parliament) without proper consultation with teachers. Although, in response to the teachers' demands, the charter has been thrown open to public discussion, the battle is not over.

The protests came both from the "old" Union of Polish Teachers (which in some areas pulled its members out on strike) and from Solidarity. A typical protest letter (from the staff of the Fifty-third General Secondary School) published in the Catholic daily *Slowo Powszechne* described the attempt shockingly incompatible with the Government's promises of "open consultation with

society" before new legislation is passed.

Very few educationists were lucky enough to see the text of the draft which was re-published by the Ministry of Education and Upbringing. The huge Mazowsze (Warsaw and home counties) region of Solidarity, for example, got only one copy and had no time (nor photocopying paper) to make duplicates. One typical Warsaw school teacher, for example, thought that the main point of the controversy would turn on the date for the mid-session holidays, at present staggered throughout January and February (causing considerable difficulty to families with children in both primary and secondary schools), but which teachers would like restored to the pre-war Christmas and Easter pattern, a suggestion which would be opposed by Party die-hards, but which is hardly crucial.

Those who did see a copy of the 42 page document found more se-

rious points of conflict. Article 1, for example, binds the teacher to educate children in the spirit of the principles of social coexistence and... "the brotherhood of all people of the whole world" - a formulation which runs counter to resolutions of the recent Solidarity Congress, which called, *inter alia*, "the state's neutrality towards the views in all spheres, above all in the sphere of national education".

Even more provocative is article 5.2, which reads "The teacher is bound to observe the instructions and guidelines of the organs supervising the school and supervising the teacher's opinion, conflicts with the law, strikes at the interests of society or contains obvious errors is a person who issued it, but if the teacher is then repeated in writing, though he may notify his objections to the organs supervising the school".

Alan McGregor reports from the ILO meeting

Idea to isolate stress-causing pupils

Special classes or schools for pupils imposing "unprecedented" stress on teachers were recommended at a 10-day conference on conditions of work for teachers, held at the International Labour Organization in Geneva.

While the overall aim must always be integration, delegates considered "it may be appropriate" to separate handicapped pupils, those with different national or cultural backgrounds or disruptive children "until the disparities from general school or class standards have been reduced to acceptable levels".

To counter disorderly conduct and acts of violence against teachers, the meeting suggested closer association of pupils and parents with specific aspects of the functioning of schools and steps to promote better understanding between pupils and teachers - as well as appropriate disciplinary measures.

It also advocated that teacher training should give more consideration to stress-generating factors and that greater attention be paid to motivation, adaptability and general suitability for the profession.

On redundancy, delegates concluded that lowering class sizes and raising the quality would be preferable alternatives, in conjunction with encouragement of early retirement without diminution of rights. They also recommended a reduction in intake - to be used with caution - and arrangements to enable individuals wishing to do so to work part-time temporarily.

West Germany / Susannah Kirkman

Union wants action as jobless queues lengthen

BONN: The main German teachers' union (GEW) has called for urgent measures to combat rapidly rising teacher unemployment in West Germany.

The union president, Herr Dieter Wunder, said it would be "a scandal" not to take action, in view of the 20 per cent increase in unemployed teachers since last year. According to GEW figures, half of the 40,000 newly-trained applicants for teaching posts have failed to find jobs this year.

The GEW also quoted an international labour organization estimate predicting 100,000 unemployed German teachers by 1995. Between 30,000 and 40,000 teachers are already working on a temporary basis.

In a letter to the State education ministers, Herr Wunder urged the introduction of shorter working

Australia / Bill Purvis

Dons study decline in language class numbers

SYDNEY: A survey has been launched to find out why Australian high school students have turned away from the study of foreign languages.

Despite a massive intake of non-British migrants in the past 30 years, the proportion of high school students taking a foreign language has fallen dramatically.

In 1953, when the immigration programme was about five years old, the proportion of candidates sitting for examination in a foreign language was about 60 per cent. Apart from a slight resurgence in the late 1960s, it has fallen steadily, and last year the figure was only about 17 per cent.

The greatest impact has been in the study of the classical languages - last year in New South Wales, Australia's most populous state, only 152 students sat for Latin in the higher school certificate exam. French has suffered a recent decline - down from about 12,000 in 1974 to fewer than 9,000 in 1980.

In the mid-1960s, there were signs of a resurgence overall, mainly due to "Australians' sudden interest in Asian languages, especially Indonesian. That has since waned and now Indonesian language study figures are declining too.

Despite the decline in student numbers, one thing that has increased is the number of languages being studied: Arabic, Turkish and Japanese are among the recent additions, due to modern influences of trade or immigration.

Two members of the education department at MacQuarie University in New South Wales have begun a sur-

vey to find out the reasons for this phenomenal decline.

Dr Ken Ellis and Dr Greg Cooney will collate information from questionnaires sent to all high schools in the state.

Some 440 high schools have agreed to take part: the questionnaires went out in mid-August and work started this week to collate results.

Dr Ellis said a preliminary look of the responses indicated there was some interesting data, but it would be March or April next year before the results would be available.

Dr Ellis said they then hoped to start on the second stage of the project - writing to members of examination committees and other educationists with specific questions about the data showed.

Organizers of a public meeting on education in Sydney this week were overwhelmed by the response.

The impressive list of speakers at the meeting, in Sydney's town hall, was headed by the Chief Justice, the Family Court of Australia, Justice Elizabeth Evatt.

The theme of the meeting, to climax on children's week in New South Wales, was: "Parents and pressure".

However, the meeting was also done after 20 minutes when the would-be speakers found themselves facing an empty auditorium.

An organizer said she thought the industrial strike which had closed schools was partly to blame.

United States / Peter David

Teaching kit on Klan sparks row over 'false' race view

WASHINGTON: A teaching kit on the Ku Klux Klan, distributed to schools by America's biggest teaching union, the National Education Association, has become the object of a sharp argument with the rival American Federation of Teachers.

Mr Albert Shanker, president of the smaller AFT, used his column in the *New York Times* last week to call for the withdrawal of the teaching kit from the nation's classrooms.

Mr Shanker predicted that the kit would bring the public schools under attack. "The public schools should not be used to propagandize for one particular ideology. Of course it's difficult, if not impossible, to be completely objective on controversial issues. But that doesn't relieve the teacher of the effort at fairness," he said.

Mr Shanker concedes that much of the material in the NEA's teaching pack, prepared jointly with the Congressional Education Association and the Council on Interracial Books for Children, is "just the kind of thing most teachers would like to have to help them deal with an important subject".

But he claims that the pack includes comments which imply that all of American society is inherently racist and belittles the economic and political progress made by blacks. At one point the offending kit says: "It is important to remember that the Klan is only the tip of the iceberg, the most visible and obvious manifestation of the entrenched racism in our society."

Mr Shanker's column concludes: "We don't need a jingoistic, flag-waving, blind patriotic education. But neither do we need an education which teaches that our society is innately racist and that the Klan represents the essence of America rather than an aberration."

A spokesman for the NEA said the association had no intention of withdrawing the teaching kit and dis-



Terror in the saddle: tip of the iceberg kit says.

missed Mr Shanker's criticisms as part of the traditional rivalry between the two unions.

In any event, the NEA will soon have an opportunity to seek revenge: the AFT is in the process of producing its own teaching pack on the Ku Klux Klan, but was piped at the post by the NEA.

In a landmark decision last week, the local electors of Washington DC trounced supporters of a controversial proposal to introduce a system of tuition tax credits, which would have enabled parents to reduce their taxes by up to \$1,200 (£625) for school fees for each child they sent to a private school.

The proposal, supported by the National Taxpayers Union with a

\$125,000 publicity and television campaign, was put to a referendum vote as part of the capital's school board elections.

A bitter struggle waged between the union on the one hand and a coalition of educational and parent groups on the other resulted in record attendance at the polling booths. Nearly 31 per cent of the district's electors turned out to register more than 73,000 votes against the proposal and only 8,904 in favour.

The defeat was the second on this issue for the taxpayers' union, which tried unsuccessfully to introduce a similar ballot into elections in California in 1979.

Michael Heafford looks at France's private schools

Socialists face church and state issue

times to vary considerably from region to region. The stance of individual Frenchmen in the debate is, therefore, often more determined by their family tradition and local origin than by their social class or educational outlook.

Another key factor is the existing legal relationship between the state and private sectors. The present compromise was reached in the "Décret Law" of 1959 which allowed private schools, if they wished, to enter into a "simple contract" or a "contract of association" with the state. Under both contracts the state undertook to provide subsidies to any private school which brought curriculum and staff qualifications into line with those in the state sector.

As the main support offered to schools in return involved the payment of teacher salaries, it is hardly surprising that the vast majority of private schools entered into one or other contract with the state. Because teaching is so labour intensive, the payment of teacher salaries by the state meant that most schools found they only needed to charge very modest fees - thus offering to the poorest parent the genuine freedom of choice between

state and private education which is denied to most British parents.

As financial barriers were lowered, the private schools gained added popularity by the troubles which beset state schools in 1968 and the ensuing years. Many parents came to see the private system as a haven of calm existing alongside the continual staff and pupils strikes which were besetting state schools. Even so, the most prestigious schools in France today remain the top state lycées and a career within the state system is still the prime ambition of most aspiring teachers.

In fact the issue of private schools is one on which feeling runs high, but over which a workable compromise has been in operation for a number of years.

The Socialists may seek to give vent to their traditional opposition to such schools by seeking to integrate them into the state system. They will certainly be under strong pressure from groups like the state teachers' unions and the national association for parents of children in state schools, which has more than one million members, to take this sort of approach.

However, if they do so, they run the risk of alienating many French citizens, especially in certain regions of the country. Such action could, in turn, affect their future electoral performance.

But perhaps a less drastic solution might be possible. Within the wider context of the decentralization and regionalization proposed for state schools, private schools might be integrated without loss of autonomy. What is clear is that a new compromise will not be achieved without a certain amount of sabre-rattling and scare-mongering.

Travel

Courtlands Centre
South Devon



Field Studies

Ideal location for rocky shore, coast, Dartmoor.
• Marine Biology • Geography • Environmental Studies
• Geology • Civil Engineering

Secondary & Primary

• Field & Country Projects • Outdoor Pursuits
Canoeing, Sailing, Pony Treks, Beach Sports, Fishing, Assault Course, Orienteering and more. Navigation, Coastguard, Dartmoor projects.

Comfortable Accommodation • Good Food • Licensed bar

• Gym • Project Rooms • Playing Field

Courtlands Centre TES

Kingsbridge, South Devon

Tel: Loddswell (054 855) 227

NST LTD

(School & Youth Group Travel Specialists)



GUARANTEED FIXED PRICES
FOR OUR 1982 EUROPEAN TOURS

Our 'Schoolcoach' tours are guaranteed fixed for the whole of 1982 and include a full coach excursion programme in the tour cost.

Write to-day for details to-day to:

NST FREEPOST

13-17 All Hallows Road, Bispham, Blackpool FY2 0BR

(Tel: 0253 62525 (10 lines))

CAA LICENCE
13698

CONT RAIL
ACCREDITED AGENTS

FY10

NST LTD

(School & Youth Group Travel Specialists)



GUARANTEED FIXED PRICES
ON OUR 1982 UK PROGRAMME

Our 'Schoolcoach' tours are guaranteed fixed for the whole of 1982 and include a full coach excursion programme in the tour cost.

Write to-day for a copy of the 1982 brochure giving details of many attractive centres where we still have availability for the coming year.

NST FREEPOST

13-17 All Hallows Road, Bispham, Blackpool, FY2 0BR.

(Tel: 0253 62525 - 10 Lines)

NEWBOURNE'S BRITTANY WEEK

8 days in Benodet from £110.00 per week per person. Open air suppers, a barbecue and restaurant meals all included. South Brittany is the ideal centre for constructive project work and active leisure.

Caravan accommodation providing hotel comfort with camping freedom. Our coach and driver stay with your party throughout the 8 days to provide transport as required. Carnac or Brest are two typical day excursions.

NEWBOURNE TRANSPORT

For complete information write to
Newbourne Transport,
29b Rowley Way, London N.W.8

ADDRESS.....

Talkback

The wrong lesson

Jude Collins

In 1975, Lawrence Stenhouse made the point that "there is in many schools a consciousness of the possibility of insurrection by the student population". Judging by recent figures in a *Quarter of a Million Beatings*, produced by the Society of Teachers Opposed to Physical Punishment, that same consciousness continues.

STOPP surveyed 10 education authorities in Britain, and concluded that in English schools a beating occurs on average once every 20 seconds. Gateshead and Newcastle schools figures well above the national average, while over the border in Scotland they manage a beating every two seconds.

Most people, when confronted with statistics like these, feel uneasy. But it could be argued that it is because public response stops at a sense of uneasiness, and never becomes action, that these things continue. Teachers with the cane go on caning, either because we, the public, oppose them with woolly liberalism, or because in our hearts we feel that sparing the rod and spoiling the child still makes sense.

Certainly, here in Northern Ireland, the observer soon notices how parental love is strangely mixed with a need to be as stern as the next man/woman. At family gatherings or social functions, when children quarrel, parents outdo one another in insisting that their Billy or Sean was to blame for the whole thing, and wait until they get him home.

Tourists (the few that still come) prompt another facet of the same national attitude to show itself. Scorn for Americans covers many things - American ties, American cameras, American accents; but it is the American tendency to spoil their kids rotten that really agitates. In Irish eyes, parental sopiness is the sin for which there is no forgiveness.

This insistence on firmness flows into the ways in which schools are perceived and run. When I speak about educational matters with my student-teachers, it is a gilt-edged bet that the words "discipline" will be used by someone inside the first few minutes. The same happens when talking to parents or practising teachers.

For all three groups, the school with strict discipline is "good" - basically sound, on the right track. By implication, the school without such strict discipline is in a state of decay, on the road to punkery and ruin.

Or I talk with my own children. They attend what I consider an enlightened primary school, comparatively speaking. Yet they tell me of children who are caned for not having exercises done, talking at the wrong time, spilling milk, spending too long in the toilet.

STOPP did not include Northern Ireland in its survey. Had it done so, I am convinced the province would



Irish children confront an English soldier: anti-authority activities encouraged when teachers use the cane?

have featured up there in the table with the Scots and Geordies.

It could be claimed that the situation in Northern Ireland schools is a response to "the troubles", that Ulster teachers see "the possibility of insurrection", and are all the more concerned to prevent similar lawlessness in their classrooms. But the Irish classroom violence predates the present troubles.

Those of us who were schoolchildren in Ulster in the late 1940s and early 1950s remember that common playground boast: "If I told my mammy I got slapped at school, she'd murder me." My mother recalls her schooling in Donegal in the early years of the century, and a village schoolmaster whose love for learning shone so fiercely, that effected pupils had sometimes to be carried out and laid to rest in a tombstone in the nearby churchyard.

There are people in both England and Ireland who would grant that yes, corporal punishment is imperfect from a moral standpoint, but at least it works - it gets the job done. Had it not successfully encouraged or squashed those things it set out to

encourage or squash, it would long ago have been abandoned.

While this argument has plausibility, it is hard to prove. The reasons for the use of corporal punishment are as varied as the teachers who use it and the children on whom it is practised. Besides which, teachers and everyone else do things for other reasons than that they achieve logical ends. Sometimes people engage in acts simply because it makes them feel good.

The kind of teacher given to corporal punishment is interested in promoting a society where young people show a willingness to follow directives and display respect for authority. This makes Brixton, Toxteth and of course Belfast even more puzzling.

The young people involved in disturbances in these cities are patently anti-authority and unwilling to do what the law requires. Have they, then, not been exposed to physical punishment during their school years? That seems hard to believe. The more likely truth is that physical punishment has been meted out to these and other young people, and

has taught them a lesson - but not the one intended.

The lesson they have learned is that if you want people to do things your way, clout them about a bit. Human nature, the lesson continues, will be amenable to reason and persuasion only after you have got its attention by thumping it over the head.

Perhaps it is time the public in general and particularly teachers, on both sides of the Irish Sea, stopped falling back on the comfortable old adage: "I got far worse when I went to school, and it never did me any harm." Education should be in the business of doing good, rather than (perhaps) avoiding harm.

There are those at present in Northern Ireland and mainland Britain who are prepared to stake their lives on the belief that violence gets results. Those who choose to seek a peaceful solution for Ireland and a preventive cure for English cities could do worse than start their quest for an answer at the front door of their local school.

Jude Collins is in the faculty of education, Ulster Polytechnic

Future parents

Mel Lever

Margaret Clark ("Missing Relationships", *The TES*, October 23) died at length CSE provision in care and development/parental. Fourteen boards now cover this subject, and yet she mentions only one mention of O level provision made, nor any other alternative.

The National Association Maternal and Child Welfare for all levels of pupils and students. Three are followed mainly in schools and our General Part I is accepted an A or B grade pass by the CSE Nursing Councils as an alternative to an O level for entry into nursing. The higher two examinations are awarded in colleges of further education, and are training courses leading to careers as nannies, hospital leaders in nurseries, play-groups or other such places.

The NAMCW regularly asks students, ex-students and teachers to comment on the syllabus (by means of questionnaires and examination questions). The syllabus are again being revised to meet current needs. Meanwhile, we give new ideas by attending and organising conferences and seeking advice of experts.

Margaret Clark says that a study "is underlined by all hands". The value of a child study is recognized by colleges of education almost everywhere, as first-hand knowledge of child development backed by theory, is the best model of learning and internalizing information. All students of NAMCW courses are expected to do a child study, and spend a good portion of their time in child care centres. This reinforces the intellectual basis of our courses.

The number of boys taking our courses is growing. In one form college, a boy who has followed all the NAMCW courses, who has been awarded an O level grade A and three A levels at the same grade, has put off accepting a place at Oxford for a year in order to work with children. We want to attract more boys, and our syllabus are designed for both sexes. Teachers and careers officers should make this apparent.

I, and my board of examiners of whom are professional teachers, examiners and health visitors, endeavour to ensure that our pupils are learning to become "parents of the future". Our syllabus point, as do the many letters and answers to examination questions from students. For this reason we longer use "parentcraft" as a title of our theme. Our courses are headed "Child Care and Human Development" and our Certificate "Family and Community Studies".

Mel Lever is head of the education department, National Association for Maternal and Child Welfare.

and student bodies, empowered set up and vet courses, and awards, should be created. It should operate under a National Education Council for Community Education, with overseeing authority, and acknowledge an integral part of the education system. An injection of £50m to accomplish this, since the basic terms already exist.

Without a wide, all-inclusive provision of purposive, creative and creative activity, the nation will massive increases in crime, violence, crime and mental illness on a scale that cannot be contained.

Peter Buck is principal of Education Institute of Adult Education.

Denying adults

Peter Buck

I welcome Tom Daveney's views that some kind of responsible-body set-up might add some security to local authority adult education (*The TES*, September 4). But I feel that some radical thinking needs to be done very rapidly, so that measures can be adopted to ensure an appropriate and relevant future - one perhaps which will require us to accept a different brief for its activities, and more responsive to other agencies in our communities. It certainly implies

a national recognition of the needs of adults in a world which is changing so swiftly that the ability to cope with change has become essential learning for all who are capable of learning - that is, most adults.

Many millions of adults are woefully undereducated in terms of work skills, informed understanding of social and political issues, and broad cultural appreciation, and, indeed, in grasping what many professionals (doctors, lawyers, social workers) are about. Change is the central subject matter for constant identity and existence are to be maintained in industrial, political, social and cultural terms.

Adult education's biggest provider is the local education authority, vastly out-numbering the extra-mural de-

partments and the WEA put together. Nor must we forget the churches, clubs and the mass media who provide some educational (or educative) activities; and profound respect is due also to the lone adult working and studying for the OU, correspondence courses, or to a regimen of personal devising.

All these "webs of learning" could provide learning opportunities beyond any we yet offer. If a co-operative effort were made to open who in the main provide the rates and taxes - and then the fees - to maintain them. Is it not crazy to give millions of pounds to young peoples' student unions, and deny the same facilities to conscientious adults eager to learn?

Governments of all complexions

have merely accentuated the long-standing philistinism of those who gain power. Mark Carley showed once more the short-sightedness of ministers in asking for a report only on the needs of the unemployed adult. It is a start; but it must go wider - to all adult learning needs. Institutions must respond to the needs of adults by removing rigidity in fee structures, entrance regulations, standards, course compatibility, and begin offering part-time timetabling, flexible modular courses, and so on. We must recognize that areas of knowledge exist appropriate to and understandable only by adults, because of their responsibilities as citizens, parents, workers, trade unionists.

Local development councils, embracing all the providing agencies

Beyond the work ethic

Bernard Davies looks at the 'colonization' of education by the Manpower Services Commission, and the implications of this for other youth agencies



Even before the July "riots" concentrated our collective mind, our society was again into a deeply anxious period about "youth". "Law-and-order" had largely been conceived as a metaphor for tough juvenile justice policies. Mass unemployment was, according to the president of the CBI, raising "a growing and frightening spectre". An increasingly vociferous and organized lobby was demanding some form of national service - possibly compulsory, and perhaps with a military component. More positively, the education and training of 16 to 19-year-olds had become a focus of intense debate.

This renewed concern has produced some highly visible results: "glass-house" regimes for young offenders; "special programmes" for the young unemployed; and "new training initiatives" for the non-academic school leaver. Less obvious are changes in the way we conceive of "youth", as our policy makers strive to "sell" new approaches and facilities not just to the young people themselves, but to those with political muscle.

A century or so ago, the term "adolescent" was in effect invented to describe a "new" stage in the life cycle characterized by its unavailability, instability and emotional and psychological turmoil. Concealed thus, it justified extended adult intervention in the life of the young teenager, just at a time when large numbers of them were neither at school nor at work.

This intervention often emerged of course as "education" or "youth work" or "child-saving" social work, and as such brought the young some useful gains. Nonetheless, the new concept helped validate urgently needed social policies designed in part to contain an uncontrollably independent youthful population.

Today, large numbers of young people - this

man as many as half of those aged 16 - are again neither at school nor at work. And again we are busily reconceptualizing the age-group concerned by insisting that they have previously unidentified "social and life" needs, calling for their wholesale withdrawal from the labour market and extended education and training.

To date, this newly discovered extra stage in the life cycle located somewhere between "adolescence" and "adulthood" has attracted no specific label - unless you count the Manpower Services Commission's uninspiring term "youth". Nonetheless, the reconstruction of our perceptions of the older teenager in response to our pressing economic and political needs is unmistakable.

Such social and ideological changes can generate some valuable policy advances. If, for example, our creation of an almost totally redundant generation finally forces us to update and rationalize our educational provision for the young school leaver, necessity will have been the mother of a most valuable invention.

For decades, something like a third of this

group has entered the labour market not only unqualified vocationally, but often permanently hostile to anything labelled "education". As long as these young people had some economic usefulness - harshly unrewarding though their jobs might be - then no collective action on their behalf seemed necessary or justified. Now, things might just change.

However, the intrinsic "good" embedded within proposed new youth policies cannot be taken for granted. In present conditions, little attention is apparently being paid to the young people as individuals with a wide range of unmet talents and possibilities, who are and can become much more than "young workers" for a reconstructed economy.

For, in response to this reconstruction, youth services broadly conceived are themselves being radically restructured - though not necessarily in young people's interests.

According to government plans, current expenditure on schools between 1980-81 and 1982-83 will fall by some 5.5 per cent, and on the Youth Service by over 6 per cent. In the same period, teaching posts will reduce by at least 6 per cent, with research for a somewhat further period - 1976-77 to 1979-80 - showing that Youth Service staffing has already plunged by about 17 per cent.

In this same period, the Manpower Services

Commission has emerged as the largest and best resourced "youth agency" this country has ever known. An injection of £50m to accomplish this, since the basic terms already exist.

Without a wide, all-inclusive provision of purposive, creative and creative activity, the nation will massive increases in crime, violence, crime and mental illness on a scale that cannot be contained.

Local development councils, embracing all the providing agencies

have merely accentuated the long-standing philistinism of those who gain power. Mark Carley showed once more the short-sightedness of ministers in asking for a report only on the needs of the unemployed adult. It is a start; but it must go wider - to all adult learning needs. Institutions must respond to the needs of adults by removing rigidity in fee structures, entrance regulations, standards, course compatibility, and begin offering part-time timetabling, flexible modular courses, and so on. We must recognize that areas of knowledge exist appropriate to and understandable only by adults, because of their responsibilities as citizens, parents, workers, trade unionists.

Local development councils, embracing all the providing agencies

have merely accentuated the long-standing philistinism of those who gain power. Mark Carley showed once more the short-sightedness of ministers in asking for a report only on the needs of the unemployed adult. It is a start; but it must go wider - to all adult learning needs. Institutions must respond to the needs of adults by removing rigidity in fee structures, entrance regulations, standards, course compatibility, and begin offering part-time timetabling, flexible modular courses, and so on. We must recognize that areas of knowledge exist appropriate to and understandable only by adults, because of their responsibilities as citizens, parents, workers, trade unionists.

Local development councils, embracing all the providing agencies

have merely accentuated the long-standing philistinism of those who gain power. Mark Carley showed once more the short-sightedness of ministers in asking for a report only on the needs of the unemployed adult. It is a start; but it must go wider - to all adult learning needs. Institutions must respond to the needs of adults by removing rigidity in fee structures, entrance regulations, standards, course compatibility, and begin offering part-time timetabling, flexible modular courses, and so on. We must recognize that areas of knowledge exist appropriate to and understandable only by adults, because of their responsibilities as citizens, parents, workers, trade unionists.

Local development councils, embracing all the providing agencies

have merely accentuated the long-standing philistinism of those who gain power. Mark Carley showed once more the short-sightedness of ministers in asking for a report only on the needs of the unemployed adult. It is a start; but it must go wider - to all adult learning needs. Institutions must respond to the needs of adults by removing rigidity in fee structures, entrance regulations, standards, course compatibility, and begin offering part-time timetabling, flexible modular courses, and so on. We must recognize that areas of knowledge exist appropriate to and understandable only by adults, because of their responsibilities as citizens, parents, workers, trade unionists.

Local development councils, embracing all the providing agencies

have merely accentuated the long-standing philistinism of those who gain power. Mark Carley showed once more the short-sightedness of ministers in asking for a report only on the needs of the unemployed adult. It is a start; but it must go wider - to all adult learning needs. Institutions must respond to the needs of adults by removing rigidity in fee structures, entrance regulations, standards, course compatibility, and begin offering part-time timetabling, flexible modular courses, and so on. We must recognize that areas of knowledge exist appropriate to and understandable only by adults, because of their responsibilities as citizens, parents, workers, trade unionists.

Local development councils, embracing all the providing agencies

have merely accentuated the long-standing philistinism of those who gain power. Mark Carley showed once more the short-sightedness of ministers in asking for a report only on the needs of the unemployed adult. It is a start; but it must go wider - to all adult learning needs. Institutions must respond to the needs of adults by removing rigidity in fee structures, entrance regulations, standards, course compatibility, and begin offering part-time timetabling, flexible modular courses, and so on. We must recognize that areas of knowledge exist appropriate to and understandable only by adults, because of their responsibilities as citizens, parents, workers, trade unionists.

Local development councils, embracing all the providing agencies

have merely accentuated the long-standing philistinism of those who gain power. Mark Carley showed once more the short-sightedness of ministers in asking for a report only on the needs of the unemployed adult. It is a start; but it must go wider - to all adult learning needs. Institutions must respond to the needs of adults by removing rigidity in fee structures, entrance regulations, standards, course compatibility, and begin offering part-time timetabling, flexible modular courses, and so on. We must recognize that areas of knowledge exist appropriate to and understandable only by adults, because of their responsibilities as citizens, parents, workers, trade unionists.

13.11.81

Living playfully

Continuing our series on the 'contracting curriculum', James Mason argues that drama is an essential activity for developing communication and collaboration skills in all young people

Where it is included in the secondary curriculum at all, drama is usually on the fringe in terms of the allocation of time, money and staff.

The case for its retention (or introduction where it is absent) is not a case for its retention on the fringe, but for it to have a stake in the mainstream of the curriculum. Work in drama involves approaches to knowledge, to the development of personal growth, and to the exploration of social and political values which should be at the core of secondary schooling now and in the future.

Perhaps drama specialists have done too little to combat the impression that drama is to do with directionless "self-expression" and the generalized expression of emotion and feeling. Certainly it is about the education of feeling. But that is a different matter. To pursue this we must look more closely at what actually goes on in drama.

All drama activity has essential elements in common. There can, for example, be no drama without pretending. In drama you are asked to be someone that you are not, in circumstances that are make-believe, and in an imaginary environment which in all probability is

created symbolically by objects (frequently desks and chairs) found in the actual space in which the drama work is being done. Far from being a form of escapism, this pretence is the foundation for a series of important interactions, not only between individuals but, crucially, within individuals.

The first of these concerns the taking-on of a role. When you act out a role in drama, you do not cease to be yourself. You become yourself in role. An interaction is set up between your feelings about yourself and your feelings about the role you are exploring.

Secondly, you will have feelings about the overall situation that is being acted out. These will be "called-up" as the process takes place.

Thirdly, what is being demanded is that you search to make an authentic response to feeling both in acting out your own role and in reacting to others. There is a stillness and concentration that falls upon a group when its work approaches the authentic. Within the symbolic world of drama, felt experience is called upon, shaped and modified both individually and collectively.

We each live in an "inner" and an "outer"

world. The "outer" world is outside us in the sense that it does not depend on us for its existence. It consists of objects, people, information, ideas and so on which we regard as "real". The bulk of work in schools is devoted to the presentation and explanation of this "real" world. Our intelligence is measured by our ability to adapt to it.

But we also live, each of us, in a private world of feeling, one that is entirely dependent on us for its existence. We need to learn to adapt to this inner world as much as to the outer one. We live in it just as much. But most schooling ignores it.

The argument that we need to educate the whole person, that we need to know about ourselves as well as about the world, is strong enough on its own. But there is the further point that what we call the "real" world is in fact seen only from our individual inner world. Equally, our felt experiences are the products of interaction with the outer world.

So there is an area in which these inner and outer worlds interrelate and overlap. Here we handle both our feelings and our perceptions of the real, given world. Here we construct and reconstruct the meaning of things and our sense of self.

Drama operates, as I have tried to show, in this area between the individual's felt experience and things outside him or her. It is a medium through which the expressive, felt impulse can be shaped and explored.

Like theatre, but for the participants not for an audience, drama particularizes human concerns. Whatever the information or the issues with which theatre deals, it places them in the context of particular people at a particular moment. Drama does this for those taking part. It places the individual, the whole person, at the centre of the "outer" world problem that is being handled. And it sets an "inner" world problem to be resolved.

Work in drama approaches knowledge and

the central part played in all our lives by the subjective. But, unlike many other art forms, drama is a collective activity. It is about collective explorations of felt experience, and about collective statements.

As a result, participants are uniquely placed to explore the complex territory of personal and social values, and the connections between private and public. This is a territory that official documents about curriculum have long claimed to be occupied. The truth is, it is scarcely mapped.

Because drama is active, places individuals on the spot and engages the whole person, it is a particularly effective developer of language spoken and written. In drama people are for language, experience its possibilities, test both its meanings and the values behind it.

Because drama is a collective, social activity it provides an arena for the development of the skills of communication and of collaboration. These are essential skills. For young people drama removes the blocks that stand in the way of their acquisition as no other curriculum experience can do. But the essence of the case for drama is that it handles knowledge, learning and the development of the whole person through its specific concern with the world of felt experience.

This matters to all young people of whatever ability, however measured. It is vital that this approach should not be downgraded as the enter adolescence. To live creatively is to be playfully. Healthy individuals and a healthy society depend on our ability to recognize the schooling should concern itself with the whole person, with the education of feeling as well as the exploration of values.

James Mason is deputy head of Islington Grammar School, ILEA.



Sport for some

How keen on games are girls when the element of compulsion is removed? Jenny Oldfield reports from Birmingham

"Action makes the heart grow stronger" reads the Health Education Council poster in the sixth-form college corridor. Tolkien's old school, St Philip's, is turned over to A level studies and girls. Nearly 50 per cent of the intake is now female.

"Is your body coming between you and the opposite sex?" asks another poster, of a generation of sedentary youth. Team lists, award schemes and the offer of 32 sports and related options last year all encourage the sixth form to keep fit.

Birmingham has started to ease 16-plus students out of schools into colleges. At present, the choice ranges from a college of further education such as Matthew Boulton, through St Philip's, to the King Edward's Foundation, a set of direct grant and independent grammar schools.

None can compel its sixth-formers to play games and so definitions hover around "persuasion" and "expectation". No more bashing a hockey ball down the left wing, no more coming county runs in foul weather. Games in the sixth form has a more sophisticated presentation as elective studies. Girls can play squash, keep-fit, jog and dance.

Given the choice, do they? Does it depend on the style of the institution? The quality of

the teaching? The facilities on site? Will sixth form colleges educate our girls for leisure by giving them skills of racket games, the ethos of team spirit, the concern about their health to be perpetuated in later life? Do girls like playing games?

Matthew Boulton College of Further Education is high-rise, circled by ring roads. There is no games staff, no coaching, no supervision of Wednesday afternoon's elective studies, and all sports facilities are off site. Team games prove impossible. The boys prevent girls from joining the soccer teams "unless not enough boys enrol". One girl applied. The boys thought it "just silly". Most girls in any case do not want to play soccer at 17, considering it undignified.

More individual sports such as badminton, squash and swimming are pursued by a minority of Matthew Boulton girls. These are the keen games players, prepared and able to join clubs outside college. Many more use a timetable clash to opt out of games. Exercising this kind of personal choice, often based on apathy and recognized as such, is seen as an essential factor in finding independence.

Few think of fitness as desirable. Games is a bind, stupid when you have the bother of changing, going into the freezing wind and rain with recently washed hair. Even judo and

self-defence activities for better subway and city centre protection receive little support. The police cadets go on cross country runs and cause some amusement. Is interest in sport bad for your image then? No, they did not care about that; it's sheer laziness.

While Matthew Boulton shuffles away from education for leisure, King Edward's High School rolls smoothly on. Surrounded by games fields, proud of its swimming pool, tennis and squash courts, its emphasis is on good teaching, wide options and confidence in the importance of fitness and a positive attitude. They are, they say, "atypical".

Committed games staff bend to prevailing fashions. More dance now, and less gymnastics since Olga Korbut faded. Two years ago, everyone wanted to jog. Now it's judo, but the money will not stretch to it.

Academic pressures leave little time for leisure, the girls protest. A clash between brain and body. Nine out of 14 girls, however, expect to play sport at 25-plus. Then come the reasons for opting out despite the encouragement of staff and environment: It's a sixth form privilege to choose, self discipline may be lacking when there is mixed company in the common-room as an alternative. Getting changed and the physical bother again figure largely. It is a 10-minute walk to the squash court.

Heels dig in over games. It is not that it has a bad image, they argue; it can even be a social asset in mixed badminton and tennis. Boys appreciate athletic girls. Most girls draw the circle of acceptable femininity around snooker, cricket, soccer, but exclude rugby and wrestling.

Sport is for pleasure, not fighting. "If a boy has a black eye, it's OK. A girl looks silly." A lone voice sums up that "sporty women have the image of not being feminine" and receives

murmured support. The general opinion is that girls are now more free to choose sportiness. Nevertheless, apathy rules an estimated 50 per cent.

In an ex-boys' grammar school like St Philip's, facilities for girls are poor - no trampolines, no athletics - and even girls who play hockey to county standard are hard done by. Timetabling and increasing pressure on the staff make a rethinking of the sports programme inevitable. Team games may disappear, like the time-honoured games afternoon before it. Facilities adequate for a school may not meet a college's needs. There is no swimming pool, squash or fives court.

Here, among a group of 10 girls, two favoured involvement in sports, one objected strongly, the rest drifted into playing if firmly organized. Badminton is popular because "not rough", "not demanding". Hockey and netball have ground to a halt through the old nightmare, timetable clash.

Most preferred mixed games because it raised the competitive level. They see boys as exercising unfair territorial rights over soccer, which some girls admit to playing in the street. They would like access to table-tennis but not dance, a swimming pool on site and a games field, which did not require a 20 minute walk.

The hard-core objectors have neither time nor incentive to play games. Boyfriends sometimes influence them against participation but this is generally disapproved of. Here too there was a 50 per cent protest against PE that morning.

You cannot drag a 17-year-old into a netball team. Neither can you persuade an overall majority that games are good for you. The hockey-loathing, sick note presenting attitude sticks, despite real efforts to respond to changing tastes in favour of racket games and esoteric pursuits such as yoga.

Off the hook

A quarter of Amsterdam's six thousand drug addicts are under 21. Lynn George reports on attempts to cure them of drug dependence

In a seedy neighbourhood of Amsterdam, a 20-year-old heroin addict waits anxiously on a doctor's doorstep for "Piet", a young street corner worker, who has arranged for him to have methadon tablets in the hope of curing him from his one-year addiction. Later, two blocks away at Piet's place, another young addict drops in for advice on claiming social security. In the evening, Piet checks the local youth hang-outs - where more young heroin addicts may require help.

It's a routine day for Piet, who is one of more than a score of young workers attached to the Street Corner Workers Foundation in Amsterdam - an organization which offers ambulatory help to addicts, including heroin addicts.

The use of heroin among young people under 21 is growing in Holland, and its users are starting younger. One can hardly open a newspaper or magazine without being confronted with this or that 13-year-old cynically relating their drug-orientated lives to a reporter.

Heroin was introduced into Holland only 10 years ago, when the Chinese in Vietnam, after the pull out of frequently heroin-hooked American soldiers, were looking for markets. Amsterdam was chosen for its accessibility, its relatively lenient laws towards drug offences, and because there was a ready waiting market of young experimenting drug users.

The sudden press interest in child junkies (as one weekly called them) has as its origins in a report published earlier this year by the local ministry of health.

According to the report, whereas in 1971 the initial users of heroin were over 21, now from 632 patients who between 1979 and 1980 presented themselves for a methadon cure, 45 had been using heroin from the age of 13 or 14.

One weekly concluded from this that if you consider that there are an estimated 20,000

heroin addicts in Holland, then about 1,400 of these may have started using heroin at 13 or 14. Drug authorities say that in Amsterdam alone there are an estimated 6,000 heroin addicts, and 1,500 are thought to be under 21.

Old working-class neighbourhoods and new high-rise flat neighbourhoods are the spawning ground for the new group of heroin users. The group can further be split into the group of white low-achievers at school who are now usually unemployed, and the ethnic minorities group - black, second-generation Surinamese and children of immigrant workers. This group finds itself increasingly discriminated against by the Dutch, whose reputation for tolerance is wearing a little thin, as they try to get to grips with increasing unemployment and a multi-racial society.

A typical teenage addict is from a broken family or has been in child care, and lives in a "squat" with a peer group of other addicts. He spends a typical day listening to music, talking and planning his next "fixes". He has no source of income and is dependent on the generosity of friends and petty thefts to nourish his addiction. "Boredom" is a much bandied word used by addicts in justifying their addiction.

Young initial users of heroin are difficult to trace and help, as they are usually not seeking such assistance in the first place. Among their group, heroin gives them "status" and they are just as much "hooked" on the heroin scene itself as on the "dope".

If they do seek help, then Holland, compared to much of the rest of Europe, has an extremely humanitarian and individualized drug help programme. Most drug help centres share the view that making life tolerable for an addict in a psychological and practical sense outweighs disapproval or coercing the addict into a cure.

A typical example of this approach is the Rainbow, a drug centre in the heart of the red

light and heroin district of Amsterdam, frequented by mainly young "junkies". Help is on a one-to-one basis and is available day and night.

The addict's addiction is accepted and initially problems such as housing, medical treatment and finance are taken care of. Jelle van Veen, the team leader, says this "release tension so that we can build up a confidential relationship with the client". Later, during talks with the addict, it is hoped to interest him in other possibilities besides "dope", which may lead to less drug dependence, or even a drug-free lifestyle.

One criticism of the drug help centres is that the young who attend them may come into contact with the more experienced addicts, and although dealing is technically forbidden, it is sometimes difficult to prevent contacts being made. Jelle van Veen is well aware of this. "With younger addicts we try to offer help in their own neighbourhood exclusively", he says.

The Street Corner Workers Foundation is different from all the other centres in that it does this all the time. By approaching the young addict himself in his own setting, it at least reaches those addicts who shy away from official "do-gooders". It organizes work projects to give the young addict a feeling of routine, and has a Squat Service, which helps the young homeless to squat and assert their rights in empty properties.

The young workers from all kind of backgrounds, including an ex-hairdresser, warn their young clients of drug dependence, and also try to demystify the emotionally laded subject of heroin - though not entirely successfully - to parents and other concerned groups. At one information evening, no teachers turned up, for fear that they would be seen by the parents as collaborating with the addicts.

Together with other drug workers, including doctors, they also have immediate access to a young person should he be arrested, and perhaps require help with arranging a lawyer, or in taking care of his domestic arrangements - like feeding his cat. It was realized a few years ago that young addicts in detention centres were not interested in receiving care from those at the centres officially appointed by the Ministry of Justice, so the drug workers can also care for their clients who are in custody.

Amsterdam city council pumps 10 million guilders (just under £2 million) into its drug policy, and does not consider the money well spent if it is in the throws of rethinking its approach to heroin addiction.

The centres are hardly a success story - the most 10 per cent of addicts are cured - but the rate is higher among young drug users - in 25 per cent are "saved" by the Street Corner Workers Foundation, although they still always return to drugs at a later age. The council wants to have more control over the centres, to reduce some of their subsidies, and to use the money for more drug prevention programmes and work projects. Even young ex-addicts feel that the centres are too "soft" with them - making it relatively easy for them to continue with their addiction.

Heroin is also an expensive addiction, becoming an increasing burden on the public. One gramme of heroin currently costs about 200 guilders (£38), and the average addict requires about five grammes a week. It makes practically all addicts petty criminals. Bicycle thefts, car break-ins and pickpocketing is rampant in the city, and enormous pressure has been put on the council by the public to do something.

Despite objections from the Ministry of Justice and Health, the city council, in principle, has decided, like England, to extend the heroin to chronic addicts: about 30 and addicts are shortly expected to be given heroin. Both council and drug help organizations want to see free methadon being more widely administered.

Methadon is a cheap substitute for heroin and just as addictive. It is administered to the addict in diminishing amounts and then slowly "cold turkey" - the agonizing effect of abruptly withdrawing heroin. Now just over 100 addicts receive methadon from a handful of doctors, or the local ministry of health.

The latter has a methadon bus which visits daily at fixed points in the city, administering the drug to ethnic groups and young heroin addicts. The ministry of health wants more local doctors administering methadon, especially to the very young users, so that they receive first-line help without having to go to a clinic attached to a drug centre. Reaching more addicts with heroin and methadon the city hopes to drive the street dealers off the street - these are seen as the most dangerous of all to the young users.

Compared to many countries, Holland is lenient towards young drug offenders. A young addict will receive a few months' probation for possession of a couple of grammes of heroin. Most drug authorities are convinced that harsher sentences are not the answer, see the problem as insurmountable.

review

The end of non-violence

By Marcel Berlins

Al, But Your Land is Beautiful. By Alan Paton.
Jonathan Cape £6.95. 0 224 01 981 3.
Africa South Contemporary Writings. Edited by Mphahlele Mphahlele.
Heinemann Educational £1.95.

Cry the Beloved Country is a hard act to follow, and Alan Paton has not been generous in his output of fiction since that masterpiece. His only other novel until now, *Too Late the Phalarope* published in 1953 inevitably suffered by comparison. After 28 years, and much other writing in between, Paton has returned to the novel form, and he does not disappoint.

Al, But Your Land is Beautiful (what blinkered visitors to South Africa always say) is the first of a trilogy, and it is Paton's most overtly political novel. He has not abandoned the painful sincerity of emotion and the almost biblical sense of personal tragedy that permeate his other works. But there is now a hard, angry edge that was not there before.

The fifties was for South Africa a decade of transition and uncertainty. The Nationalists, who had come to power in 1948, were still feeling their way, building their edifice of apartheid at first haphazardly and a little hesitantly, then with more confidence, cohesion and ruthlessness. The true end of that decade was Sharpeville.

It was also a tentative period for the opposition. The blacks had always suffered second class treatment, and if Nationalist rule had

intensified the inhumanity to which they were subjected, it had not created it. For many whites, the fifties were years of re-adjustment and anguished re-appraisal of personal attitudes. Some took the decision to become active in opposition politics - not in the sterile and almost as racist United Party, the official opposition, but in the newly formed, multi-racial Liberal Party (of which Paton was later to be President) or, more dangerously, in the extra-legal movements.

But it was not yet a time for violence. Passive resistance, the "defiance campaign", non-observance of the racial laws, were the tactics of the period. When the bus company put one penny onto the fare from Alexandra township to Johannesburg, almost every black worker walked 20 miles a day for more than four months until the bus company reversed the fare increase. Other non-violent means of resisting oppressive laws and practices were less successful as the grip of apartheid became more rigid and more uncompromising.

Paton describes those years through a mixture of literary devices, weaving together real and fictional characters, and real and fictional events. There is no central character. He parades his own heroes - Father (now Bishop) Huddleston, Chief Albert Lutuli, Helen Joseph, and Archbishop Clayton of Cape Town, who died the night after signing a declaration of his intent to defy the government's new church apartheid laws.

His fictional characters assume the familiar Paton mantle of dignity, sacrifice, courage,



disappointment and tragedy: the beautiful Indian girl whose form of protest consists of sitting quietly in a "Whites Only" library; or the white headmaster who gives up teaching to work for the Liberal Party only to find his courage failing when his family is threatened. There is tragedy in the Afrikaner camp as well - a brilliant ambitious government official is found with a black girl. A dull, committed Afrikaans civil servant comments, in letters to his aunt, on the events around him, firm in his conviction that Dr Verwoerd (very thinly disguised) then the Minister of Native Affairs, will eventually bring about the Golden Age of apartheid. The book ends with Verwoerd coming to power.

Paton juggles his characters with skill and sympathy, with only the occasional falter. *Al, But Your Land is Beautiful* is an ambitious and successful novel, and a moving testament to an era in South Africa when it was still

possible to hope for reason and justice.

The mainly black, mainly South African authors of the short stories and articles collected in *Africa South Contemporary Writings*, a Heinemann's African Writers Series, are no illusions. The common theme of the 20 stories is injustice, but their content is not political.

The message, however, undoubtedly is to writers - many of them journalists - to tell township life and of the daily bullying and the system under which they are forced to live. They write with much humour and elegance, but the underlying emotion is anger and commitment. An interesting, though uneven anthology, revealing a great deal of talent, perhaps constrained by too few preoccupations. The short stories are complemented by two moving testimonies of life by Namibian political prisoner Tjibbo Ja Toivo, and by Bishop Desmond Tutu.

Fun, fuss and fizz

Favourite Nights. By Stephen Pollakoff. Lyric Theatre Hammersmith.

Borderline. By Hanif Kureishi. Royal Court Theatre.

Arms and the Man. By Bernard Shaw. Lyric Theatre.

The Hypochondriac (Le Malade Imaginaire). By Molière. National (Olivier) Theatre.

As the steady stream of revivals rolls on two new plays attract attention. Stephen Pollakoff's *Favourite Nights* is only a cursory glance at the past without trace at Hammersmith. For the fortunes of Catherine, an elegant EFL teacher, who takes a moment to a gambling club where the couple half-strips her and fondles her breasts, proved totally unengaging. By the interval (when I left) nothing had happened to arouse interest, nothing said that might be taken for real conversation, nothing suggested a play was in progress except the interminable scene-changes with which the actors spoke.

By contrast, scene-changes are taken at a lick by the actors in Hanif Kureishi's *Borderline* which is full of human interest, contemporary relevance, excellent characterization. Max Stafford-Clark's brisk direction has one scene tumbling over another to keep things moving - or, perhaps, to deceive. For what seems to start as

"the picturesque journey of an immigrant through a foreign and possibly hostile land" ends as an unresolved exploration of the tensions between old and young in a Pakistani community: between traditional Asian socio-sexual mores and modern European socio-political and sexual anarchy.

Borderline opens in an Indian railway station from which Ravi sets off to "Great Britain". From then on we are in London - Ealing mainly - caught up in the love affair (vigorously consummated) between Amina and Haroon. Her father thinks she is a "pure little girl" and worries lest she should be contaminated by Western ideas. Haroon's father is a restaurateur whose business success is built upon exploiting his fellow countrymen. Ravi falls into his hands as an illegal immigrant. He is rescued through the efforts of the local Pakistani Youth Movement and goes to work in a factory. He loses that job, is soon cadging money again, and last seen distributing leaflets before the riot which ends the play.

Kureishi has a sure grasp of character, a sharp ear for language. In this Joint Stock/Royal Court production he is excellently served by the actors whose South-east-centred work-shops for "research and improvisation" have borne marvellous results. David Beames is very good as the slick opportunist Anwar, excellent as Amina's ailing old father Amjad - a remarkable performance. The same is true of Deborah Findlay's double-characterization of the

pragmatic young Yasmin and the illiterate, bewildered old mother Banu. Nizwar Karanj makes a splendid professional debut as Ravi. *Borderline* bears marks of being written to order. It is inconclusive about the culture-clash questions it raises. But it is funny, richly human and worth seeing.

Well worth seeing is Alan Tagg's sparkling production of *Arms and the Man*. Full of beautifully timed explosions of laughter, it comes to a fine fizz at the end. Richard Briers makes Bluntschli a wonderfully crumpled Swiss chocolate soldier, turning Shaw's anti-heroic comic lines with mastery. Peter Egan is splendidly Ruritanian in dress and manner. A strong cast makes the play a joy: two hours (exactly) of stylish wit.

Stylishness is missing in Michael Bogdanov's "make-em-laugh-at-any-cost" production of Molière's "Le Malade Imaginaire". He punctuates the play with inept juggling, dancing, miming, and introduces a five-minute version of Molière's 45-minute farce "Le Misanthrope" into the action. Within memory the Comédie Française presented in London, with style and wit, both the plays which Bogdanov mishandles. *The Hypochondriac* is very funny and firesome, but Molière survives - just - and Michael Bryant gives a fine ironic edge to Beralde.

John James



Inflation isn't simply an economic phenomenon, though the word seems to be used exclusively in a financial context. Surely our language has felt the effects of inflation, too. When recently a relative of mine referred to her "music centre" I would have seen in my mind's eye a building offering facilities and in-service courses for music teachers but she got pointed at what, to me, looked like a neat but glorified polygram.

It is not so long ago either that news-readers talked grandly, if not pompously, of the "escalation" of the Vietnam war when what was being spread or stepped up was being spread or stepped up.

Although it is all pervasive, this linguistic inflation has exercised a powerful influence on educational

Inflation

Many large comprehensives are no longer content to be divided into humble departments, but prefer to call their subject divisions "faculties". Such practices have transformed the old, unpretentious Maths Dept. (even the abbreviations are significant) into the "Faculty of Mathematical, Mathematical and Computational Studies". I know and head of such "faculty" who decided to reject such affectation and pompously. On his door he stuck the laconic but accurate notice, "Head of

Sumis." Until recently the plainly stated "backward" pupil of pre-war years was referred to as "remedial". That too has now been replaced by the much more favourable "less able" though even this seems to be giving way to "under achieving". The same inflationary spiral has hit what used to be blithely called the "average mark". This has been revamped by experts into "this difficulty index". As the drive behind linguistic inflation seems to be to call black white and to blur all distinctions, it will come as no surprise that "the difficulty index" is fast being overtaken by "the facility index".

The most flagrant example of linguistic inflation (or bombast) I have come across is "target population". I was introduced to it by my students (in higher education) who were preparing lesson plans for teaching practice in a primary school. I immediately thought it was a term from modern warfare and pictures of a city to be attacked and obliterated by massive bombing sprang into my mind. These were dispelled as soon as I read the unforgettable elucidation which followed - "Target population: a class of 35 top juniors".

Linda Hall

Curious mixture

A Tale of Two Cities. Liverpool Playhouse, until December 12.

As a variation upon the practice of presenting exam set plays, the Liverpool company under Chris Bond and Roy Broughton have dramatised one of the novels on this year's exam list. Their production is likely to be helpful to candidates studying Dickens and also offers a fair telling of the story for a wider audience. At the same time it is a curious mixture of good ideas and fatness.

One problem is the length; this is one of Dickens' shortest novels, but it reduces too many scenes to fleeting glimpses in which little atmosphere can be established. The central trouble, however, is that while the adaptation of *Bleak House* by Shared Experience and *Nickelby* by the RSC, the novel has been stripped of all its

narrative portions. We are presented with an edited form of the dialogue (complete, this apparently lasted 6½ hours). With the novel's narrative has gone not only much of the atmosphere of the period but a great deal of character sense too. Dickens' characters are not independent beings, however memorable they are, but are largely created by the author's descriptive tone.

Robbed of this, the cast are left either to old stereotypes like the Lucie of Margaret Wade or Peter Holmes's Jarvis Lorry, or to the inappropriately understated style of Gillian Hanna's Madam Defarge and Alan David's Sydney Carton.

The actors, with a couple of small exceptions, work very hard and skillfully but even Mary Sheen's delightfully stubborn Miss Fross suffers from the nature of the adaptation. Many of the scenes have a musty air about them for the production, set in a variety of striking designs by Voytek with music by Rick Jukes

that is alternately ominous and chirpy, is too often content to leave the actors wandering through the truncated dialogue in unrelated ways. There are a few moments of obtrusive clowning, but the best moments are generally those when some theatrical device is found to aid the script, as with the death-head servants in the interview between Charles Darnay and his ancient regime father, or the potentially finest scene as the Bastille walls are sealed and its door falls open to reveal a blood-soaked guillotine.

Timothy Ramsden

Cartoon competition

The results of the 'TES' cartoon competition will be published on December 4.

arts

Sins of the father

All My Sons. By Arthur Miller. Wyndhams Theatre.

In reviving Arthur Miller's early play *All My Sons* Michael Blakemore has taken a risk. Could he prove, by his sensitive yet positive direction of a strong cast, that the play is a great one, or would its "old-fashioned" melodramatic form hinder its effectiveness?

All My Sons (1947) is a three-act, well-made, Ibsenian play which employs a family setting, a great deal of exposition, a "catalyst" intruder, a letter from beyond the grave, and a "fatal secret". Like Miller himself, the production at Wyndhams makes no apology for the play's melodrama, using it rather as a basis from which to approach tragedy. After all, the "fatal secret" plot - which asks "Did Joe Keller knowingly supply faulty cylinder heads to the war, thus causing the deaths of 31 pilots?" - is all over after the revelations of Act Two. The more ambitious "tragic" plot concentrates on Keller's understanding of his crime, and is dramatized by the conflict between his own belief that his greatest responsibility is to his family, and his son Chris's belief in the "man for man" social responsibility he experienced on the battlefield. Despite the melodramatic method by which it is reached, the moment at which Keller fully recognizes that he was responsible for the deaths of sons raises him, if not the play, to tragic stature.

Colin Blakely is excellent as Keller. He captures well the speech rhythms at which Miller excels and

makes the most of his difference in appearance from the received idea of the character. He is small, greying, his juvenility is evidently nervous, and in the second act he wears a large bow tie which adds brilliantly to his drop-jawed dismay at the loss of Chris's respect. A real innovation to the character is that Blakely doesn't yell when cornered: he clearly wants to, but is terrified that the neighbours will hear.

Less effective, I think, is Rosemary Harris as Keller's wife Kate. Admittedly she gives the kind of performance that wins awards, but her interpretation seems unsympathetic to the play. She is too poised and calm for the "Mother" of the text who, in Miller's words, is given to "uncontrolled inspirations"; moreover, she is too well groomed, even too well spoken. Even her suffering seems to belong to a different order of drama.

This is, however, a strong and moving production that demonstrates the force of the young Miller's stagecraft. The intense climax to Act Two, with Chris (Garrick Hagon) paralyzed with rage and violence against his father, was brilliantly achieved. And the devastating letter from Keller's dead son Larry which brings him to realize that the pilots who died should all have been "his sons" may be an improbable and hackneyed device, but as it was passed about on stage creating such misery and horror there was no doubt that the audience ached to know its contents.

Lynne Truss

Across the spectrum

The Molecule Club's latest production for five to seven year olds which is due to tour the London area in the New Year was performed at the Mermaid Theatre in October. It is a play called *Rainbow Riddles*, a play with puppets.

The company hope to get across some of the scientific principles behind the formation of a rainbow, though they seem content in the main to concentrate on the order and hue of the colours; there is little in the play about the refraction of light by water, or the meaning of the spectrum.

The play is gripping stuff. The rainbow colours are involved in a power struggle, refusing to form a rainbow and it falls to Jenny and Jake to sort them out. Judy Harris is a warm and vivacious Jenny, and is particularly adept at encouraging audience participation, for which there are plenty of opportunities. Kevin Martin as Jake could tone down his "childish" exuberance and still appear as a child, but is otherwise excellent.

Personifying colours presents a challenge, but the company have met

it. The puppets are often truly spectacular and are also identifiable people to which the audience could relate with some emotion. Only Green Mermaid Theatre in October. It is a disappointment looking a bit like a slung Muppet.

It is a pity that the sound system often works against the colours. It is often difficult to hear the dialogue and song lyrics, but this can surely be amended. The play moves along at a good pace and the Mermaid audience were completely enthralled.

But to return to the scientific principles. Children of five to seven are old enough to begin to understand light refraction and it is a pity that so much emphasis is put on the composition of the rainbow and not on how it is formed. The play could be used as a starting point for further discussion, but in this case it would be a good idea to expand the notes to include more on light refraction and the spectrum, both for the benefit of parents and teachers and the children.

Carolyn O'Grady

Tour details from Mermaid Theatre, Puddle Dock, London EC4.

THE EVACUEES

A new musical play for schools

During the first weekend of September 1939, three-quarters of a million school children were evacuated from cities in Britain. This exciting, original musical is about some of those children. Based on fact, it is filled with true-to-life humour and packed with drama. It has eleven immensely singable songs, most of them with two parts for recorder, xylophone, glockenspiel and chime-bars, easily adaptable to other string and brass instruments. The musical is especially suitable for lower secondary and middle school children, but it is easily abridged for a younger age group. Send for complete score, script and demonstration cassette of all the songs. £7.50 post-free.

YOUNGSONG MUSIC

43, Clifton Road, Kingston, Surrey KT2 6PJ.

Historical Atlas of Britain. General editors, Malcolm Falkus and John Gillingham. Granada £15.00. 0246 14614 5.

Bold and beautiful it is, this "comprehensive survey of British history" intended to "reflect recent historical scholarship." Its maps are gay patchworks, entangled in knotted, serpentine arrows. They are bolstered by substantial texts and attractive illustrations.

Once historical atlases were less ambitious. They sat sedately upon the reference shelf waiting to be consulted when you needed to check the precise geographical context of events long ago and far away. Poole, Gardiner, Grant Robertson and Ramsay Muir, eminent cartographers, as George Philip and J. G. Barrington, traced out carefully the forgotten frontiers to create a background whereon to plot where Cromwell marched or Norman surveyors catalogued.

Passive cartography is no longer popular, unless with the Ordnance Survey, whose invaluable efforts to map our past in detail progress so haltingly. Most historians prefer more exciting, informative maps. They would demonstrate both the dynamism of history and their own individual comment upon it. Excellent German atlases, Putzger in the twenties and Westermann in the sixties, set new standards, combining meticulous scholarship with surprising revelation; nowhere else has the map, and nothing but the map, been used so consistently and effectively to expound historical ideas, illustrate processes, and provoke thought. These, given their central European bias, remain the most informative and exciting atlases.

Others preferred to supplement their maps

with pictures and text. Most successfully, the beautiful series from the Netherlands in the fifties (adapted by Nelson) applied these techniques to illuminating cultural, classical and biblical history. Alternatively, schoolteachers' blackboard inventiveness spawned the vigorous sketch-map approach, at its best perhaps in Martin Gilbert's atlases of the sixties. Again there were regional and national atlases, notably that from the Scottish medievalists, a triumph of synthesised scholarship.

In 1978 came the Barracough blockbuster, *The Times Atlas of World History*. Colourful, purposeful, quirky, its maps and dense accompanying text seem to have modelled for this parallel assault on British history. For the new generation of atlases it is the story that counts, not the geography. Precision is sacrificed for broad effect. Relevance is a more significant factor than reference in maps that select and interpret. We have fallen from the shelf, towards the coffee table, and perhaps landed between the two.

Falkus and Gillingham do not, of course, ignore the reference function. You will find useful maps of, for example, Norman castles, medieval fortresses, 1914 European armed forces. But you will not use this atlas to seek out Speenhamland (though you can see how the system spread) nor to work out how Charles found his way to Naseby; indeed, you would be hard put to it to plot any Civil War activity here.

Anyone who enjoys maps will find delights, revelations and information in the *Historical Atlas of Britain*, on the nature of the Anglo-Saxon church, maybe, or of the Tudor power-base. The editors agree their selection and treatment cannot please everyone, and I must confess to finding much that frustrates and disappoints in what ought to be a standard

book for anyone even remotely interested in the past.

First, an admitted but nevertheless regrettable fault. The editors promise to be as comprehensive as possible, then promptly exclude "our cultural heritage". This seems a judgement. Such cartographic topics as the spread of architectural styles, printing, provincial newspapers and theatres, and broadcasting are ignored, though most figure fleetingly in the text.

Then, LSE men though they be, Falkus and Gillingham apologetically segregate most of their social and economic history in two tag-end chapters, leaving political narrative awkwardly divorced from essential background. This deprives the Middle Ages and the politically unmappable eighteenth century of meaning, and makes nonsense of the map of nineteenth-century radicalism, Scottish and Welsh economic history, oddly, appear in correct chronological context, emphasising the loss elsewhere.

Let one double-page spread illustrate several omissions. "Politics and Domestic Affairs, 1914-1939" has 1,000 words of text and two large, familiar photographs of General Strike and Jarrow March. It is exceptional in that no other spread completely omits maps; there are, by my reckoning, 218 maps, 152 illustrations and 53 charts, diagrams or tables in the 200 pages. These seem sound enough proportions for what the Atlas seeks to do. But one expects an atlas to make some effort to map its subjects, not merely to illustrate them. Fewer pictures (and some are here to attract rather than to inform) might allow larger maps, less overcrowded and less willfully distorted. Here, unemployment, declining industries, special development areas would seem obvious map subjects, the data easily avail-

able. True enough, tucked away in the dispersed economics you can find two maps on unemployment. Neither is as revealing as it might be, inspiring nagging doubts: how does "design" take precedence over *compulsory*? And are geographers adequately represented among the contributors?

Distribution of car ownership and maps, culture, cinemas, radio stations we can, I suppose, hardly expect, however much light they might shed on inter-war society. But the map stresses the eclipse of the Liberals as "major political terms the single great fact" of the period. Again, surely a map? One would expect a key element in this Atlas to be a map of political maps to show shifting patterns of electoral behaviour, but all we have is a map illustrating the elections of 1880 and 1974, and then in very general terms of regional preferences rather than by individual constituencies.

The Atlas offers in disappointing abundance presents it in disappointing abundance: no identification of individuals responsible for maps or text, no sources of the novels on this year's exam list. Would these frighten the reader's eye and designers, seek? Writers who are individually excellent seem uncertain of their audience or purpose, whether to re-tell a book story, conduct a learned discussion or offer a pithy comment. Some produce gems like the lively account of Wales and the Union, others such valuable maps as these of Anglo-Saxons or Tudors, yet others are chunks of useless information.

This *Historical Atlas* seeks to be much more than a collection of maps. It may disappoint, but it will appeal to a wide audience who enjoy new and colourful side-light on British history. It cannot, though, replace the old faithfuls of the reference shelf.

arts

Television

Invading the heart

History teachers whose natural inclination is to decry television as an intellectually dissipating influence might profitably reverse gear for an hour this Sunday and again on Tuesday, when a remarkable two-part edition of *The World About Us* is shown on BBC2. Jeremy Marre's latest foray into the byways of folk music, *The Romany Trail*, represents the most illuminating filmed study of gypsy history and culture ever seen.

The films follow the trail from North India, first via Persia and then northwards through the Balkans, offering a series of tableaux of unforgettable strangeness and vividness. The gypsies gave us PUNCH and JUDY; watch it here in its pristine Rajasthani form. Gypsies have been social outcasts in almost every society to which they have attempted to form part: interviews with a family of entertainers in LUXOR bring out the implications of institutionalized ostracism more clearly than any sociological textbook could do. One of the Egyptian words for "dancing girl" means "invader of the heart": the connotations are social as much as sexual. The exorcism of a sick girl possessed by a devil is filmed, its therapeutic states symbolising Romany wanderings across the globe. Sixth forms studying Flaubert will find his letters from Egypt spring astonishingly to life.

In Andalusia Marre's team tracked down an exponent of primitive flamenco: the parallels with Islamic

prayer chants are correctly drawn. Marre's trump card has always been his ability to penetrate the secret recesses of any society he scrutinises. The family gatherings he has filmed - in Spain, Hungary and Germany - offer unique insights into their culture.

In Communist Skopje we see muslim gypsies evoking the gods of their Hindu past in a Christian church. In Hungary we see the gypsy "guest workers" travelling on a special segregated "black train" to the cities to find work, very much as the victims of apartheid do in South Africa. We see gypsy children being lectured on the virtues of socialism in Yugoslavian schools, and learn the extent of the prejudice and discrimination they encounter in reality. The Germans, it seems, have a rather selective conscience about their war crimes: gypsies sometimes change their names to Jewish ones, in order to get better treatment in the queues for jobs and homes.

Plenty here, then, for academics, politicians and feminists to get their teeth into, but plenty too for the romantics, with seemingly unfiltered footage of jugglers, acrobats, fire-eaters, and of course dancing bears.

Michael Church

Part One of "The Romany Trail" is broadcast at 7.15pm on Sunday November 15, and Part Two at 7.10pm on November 17.



From Hungary (above) to LUXOR (below).



Radio visuals

The Art of Radio Times. Compiled by David Driver with an introduction by Ann Briggs. BBC Publications £15.95.

With the possible exception of the Arts Council, no institution has made such an important contribution to the understanding and appreciation of the visual arts in Britain as the BBC. Radio programmes such as Herbert Read's *The Meaning of Art* in the thirties, and TV programmes such as Kenneth Clark's *Civilisation* in the seventies, have had an enormous influence, and the more extensive of Broadcasting House affirmed in an age of artistic intolerance the contemporary spirit in architecture and sculpture at the very centre of London.

But admirable though these contributions have been, they pale into insignificance in comparison with another, less widely reorganized influence that of the *Radio Times*. Founded in 1923 largely because newspapers were demanding a fee for printing radio programmes, its initial circulation was 250,000, and by the late thirties it had reached the phenomenal figure of nine million, making it the most successful magazine in the world.

Within three years it had launched a policy of using the work of avant garde illustrators, its Christmas number of that year featuring a strikingly "modernistic" - the word then used to describe any art form which was not Victorian - cover by McKnight Kauffer. Despite the doom-laden warnings of Newnes, then co-publishers, the circulation did not drop. And from that time onwards the *Radio Times* continued and developed this enterprising, and for long virtually unique, attitude, exposing its readers to contemporary

art forms, and so, painlessly and relentlessly expanding the visual horizons of millions of people, who would not, under their own volition, have listened to a talk on painting or watched a programme on culture.

The *Art of Radio Times* is an admirable commentary on this phenomenon, amply and imaginatively illustrated and documented. It is divided into decades, each introduced by the current editor of the magazine; there are interviews with many of the artists and an efficient biographical index. At once a document in the history of taste and of the social life of the past, it shows how the *Radio Times* exerted such a powerful influence. People were able to see the experiments which modern artists were carrying out in an unprecedented context, and side by side with more popular forms of graphic expression, because one of the addressers of the art editors of the magazine had been to commission illustrations not only from artists such as Paul Nash, Leonard Rosoman, E. F. Fraser and Ralph Steadman but also from artists in a vigorous, non-popular tradition, such as Ben Thomas, Bob Sherriffs, and André Watts. Even at the time people were conscious of the contribution to *Radio Times* was making to the building of bridges between living art and the living world. In 1932 a last art collage staged an exhibition of works from its pages.

In 1981 the Victoria and Albert's doing the same. It is holding an exhibition of works by 100 artists commissioned by the magazine, including some works which were at ever used.

Bernard Denvir

The Art of Radio Times is at V&A until February 21, 1982.

Listen while you speak

Bertolt Brecht: Poems 1913-1956. Edited by John Willett and Ralph Manheim. Eyre Methuen £4.95. 413 48790 3.

Defying conventional wisdom was a habit of Brecht's. His poetic career is a case in point. Contrary to the general rule about lyric poets, his poetry got better as he got older, got better as it grew less personal, better as it was less "poetic".

The last poem in this book of fine strong translations embodies these sort of strength: the strengths of experience, of detachment and statement.

"And I always thought: the very simplest words must be enough. When I say what things are like. Everyone's heart must be torn to shreds. That you'll go down if you don't."

Victoria Newman

What a Geat's got to do

Beowulf. By Christopher G. Sandford. Unicorn Theatre, Great Newport Street, London. Weekends until November 29.

Rosemary Sutcliffe's *Dragon Slayer*, a retelling of the Beowulf story has a wide popularity among Puffin readers: it would be less than just if Christopher G. Sandford's play *Beowulf* achieves anything less with young theatre-goers. Billed as suitable for 8-12s, in its bold theatricality it is as stirring as anything currently on the London stage.

The sweep and depth of the original poem are well caught in a mixture of direct narrative, shared at times by the whole cast, simple effective tableaux vivants, and set-piece spectacular. There is a Story-teller - a cross between Anglo-Saxon bard and ACAS official - endowed by Mr Sandford with the enviable ability to move in and out of the action, there are fights and even under-water scenes. But above all there is Beowulf the Geat, battling

to prove his bravery, aware of his destiny - a Geat's got to do what a Geat's got to do, as you might say. And if that involves taking on sea-monsters, ten-foot high ogres and a real smoke-breathing dragon, so much the better for the audience. Nicholas Barte's exciting production kept them, the young and the not-so-young, riveted throughout. Highly recommended.

Hugh David

A chance to win £750 and save the world! So says the publicity for the play competition organized by the World Wildlife Fund and the Young Vic Theatre. Three prizes of £250 will be awarded to the plays judged to be most original and imaginative. John Mortimer, Frank Cullin (TV) and Ivan Hattingshall (WVF) are two of the plays will be performed at the Young Vic next year. Closing date January 4. Forms from Save the World through Drama World, 11-13 Godalming, Surrey.

Much maligned IQ

Nicholas Mackintosh on a tendentious study

IQ and Mental Testing. By Brian Evans and Bernard Wailes. Macmillan £12.50. 0 333 25648 4. £4.95

Although one of the most visible products of psychology, IQ tests have always occupied an anomalous position within psychology. The modern IQ test was developed as a practical tool designed to solve a number of supposed educational and social problems, with little theoretical understanding of the nature of the intelligence they were supposed to be measuring. And these connections with social policy suggest that the tests are likely to have been more influenced by social attitudes or preconceived opinions. A study of the social history of IQ tests could well be enlightening.

The first and longer part of *IQ and Mental Testing* provides such a history, while in the second the authors mount a sketchy and not always convincing attack on the scientific credentials of IQ tests. The first part will be less familiar to most readers and is the more valuable. But even here readers will need to keep their wits about them. Although confident that IQ tests and the uses to which they were put reflect the grosser and more lurid prejudices of a past age, Messrs Evans and Wailes seem blithely unaware that their own attitudes may seem equally quaint to a reader 50

years hence. And their history is surely conditioned by their attitudes. They find it hard to acknowledge the possibility that IQ testing might once have been regarded as a force for social progress. But it surely was, for it was not difficult to show that IQ tests were less biased against working-class children than were other forms of educational assessment, such as the judgment of a middle-class teacher; and there was after all a time, abruptly terminated by the debacle of Harold Wilson's white-hot technological revolution, when progressive thought in this country favoured supposedly objective science over uninformed amateur opinion.

An interesting study could indeed be written of the rise and fall of this confident attitude. The disillusionment with IQ tests cannot really be justified in terms of the ritual denunciations to which they are so often subjected today. It is merely silly to suppose that IQ tests themselves were ever sufficient to justify streaming in schools or the division of secondary education into quite separate schools. As Evans and Wailes acknowledge, no facts about the influence of genetic factors on IQ could ever have been established that children must be educationally segregated. What the tests may have done is to contribute to the rationalization of a segregation already accepted for other reasons: only if one could assign children without gross error to different schools could

anyone but the most romantic conservative have argued that such assignment was right and proper.

Although they maintain some distance from the more foolish attacks on IQ tests, however, it is clear that Evans and Wailes do not like the tests or the uses to which they believe they have been put. But much of their argument is tendentious. There is a long discussion of the question, which once excited much interest, whether the national IQ was declining; at times they seem to be suggesting that such a decline was a necessary prediction from a genetic theory of IQ. At other times, their qualifications seem less than wholehearted: in a chapter discussing Burt's frauds and the poor quality of the evidence for genetic influences on IQ, the first admission that differences in IQ might be partially heritable is confined to a footnote at the back of the book, where it is promptly qualified by the assertion that it was bound to be true all along. And at yet other times, such as a singularly inept discussion of the supposed cultural bias of IQ tests, there are no qualifications to soften the ignorance exposed by their argument.

So, this is a book to be read with due caution. Let the reader beware; he should not necessarily believe all he is told. With that proviso, it is well worth reading, and anyone who uses IQ tests could only benefit from learning more about their past use.

Naomi Lewis

Children's literature

Delicious little thrills

Doory Story. By Fulvio Testa. Bill and Stanley. By Helen Oxenbury. In Summer When I Go to Bed. By Ann Wingard. Fat Pig. By Colin McNaughton. (Little Library). £1.50 each.

"The Little Library" is a good title for a new series of first-reader picture books for the very young; it suggests personal possession, a library of your own, of small-sized books. Moreover, and here are the first four, reflecting a range of moods. Doory does, I'd say, for the sheer impact of its appearance. The cover stresses the mind. It shows a door - just that. You have to look inside. Well, there's a room. The door - that door on the cover - is closed. The cat's asleep. But wait! Next page the door's ajar; a monster hand crops round. No - (turn the page) - it's only Tom with a joke glove. And with him are two other larkly boys. But wait! That scarf! A snake? Each time our responses are shared by the nervous cat on the cupboard, and the face in the picture frame, the mice on the skirting board. What's your

view of the end? Delicious thrills: a brilliant little book.

Bill and Stanley re-enacts the secret playmate theme. It's a treat, this one: Oxenbury at her best. Bill, a stolid pre-school tot, moon-faced, florid, has eaten all his cabbage. Now Mum will have to play with him. But (as we clearly see) she can't; she hasn't time. A friend does join him though as she sits on the lonely grass - that Stanley, a dog? A kid? A snow-white lamb? Well, a chum for sure. Together they play all four, reflecting a range of moods. Doory does, I'd say, for the sheer impact of its appearance. The cover stresses the mind. It shows a door - just that. You have to look inside. Well, there's a room. The door - that door on the cover - is closed. The cat's asleep. But wait! Next page the door's ajar; a monster hand crops round. No - (turn the page) - it's only Tom with a joke glove. And with him are two other larkly boys. But wait! That scarf! A snake? Each time our responses are shared by the nervous cat on the cupboard, and the face in the picture frame, the mice on the skirting board. What's your

In *Summer When I Go to Bed* takes as text a little-known children's poem by Hood, but adds an interior verse or so to give more range to the artist. Lying in bed on summer nights a small boy thinks of being a cat, a crocodile ("within the marshes of the Nile"), a polar bear (that "keeps a shop in Baffin Sound" to sell the icebergs by the pound) and other such fantasies. Each thought (a four-line stanza) provides a (facing)

miniature painting, all rather pleasant but some more assured (and so more satisfying) than others - the snake-cave, the polar scene, the sleeping boy (see cover) in a frame of summer-night blue especially. All have a mild humour and plenty of detail to occupy the young. Not bad at all, this book.

Least likeable of the four is *Fat Pig*. The rough-and-tumble archness that might enjoy its crude fun (and macabre undertones) belongs to a slightly older reading group. Fat Pig, to avoid the usual farmyard fate, is advised to stop eating - but finds it hard. Fair enough, this plot: the failure is in the pictures. McNaughton is a fine and lucid artist who will break out into monstrous grotesqueries.

"Why does he need to present his pig in human clothes? But, such being his choice, some halfway formula must be found. A grossly rendered farmyard pig bursting from all-too-realistic human garments just won't do. Oddly, he does better with the supporting cast, the two-thirds humanized Mrs. Hen, "Byron" Turkey the poet. Why poet, by the way? Even so, not Mr McNaughton's best.

Esoteric formula

Walter Benjamin or Towards a Revolutionary Criticism. By Terry Eagleton. (New Left). £8.00. 86091 0369.

The history of Marxist aesthetics is characterized by an almost involuntary complexity with Western academic practices. This results, in part, from Marx's and Engels's failure to provide a satisfactory critical apparatus. Their infrequent commenting on art, in Terry Eagleton's view, visited by a crude historicism, is equipped to deal with abstract concepts like "beauty". Would-be aestheticians of the Marxist lineage therefore resorted to Western philosophy for their fundamental aesthetic principles.

For Dr Eagleton, Walter Benjamin's writings are symptomatic of this cross-fertilization. But the relevance of interest in Benjamin over the last decade has tended to focus on his literary inquiries into the themes of consciousness, memory and experience at the expense of

the political implications of his work. Eagleton makes no secret of his intention to snatch Benjamin from outstretched "bourgeois" arms and to "manhandle" Benjamin's arguments to his own purposes.

Eagleton's starting-point, like Benjamin's, is seventeenth-century allegory. Benjamin maintains that to enslave allegorical language to external meanings suppresses the rich seam of contingencies and contradictions which constitute its immanent meaning. The interest of Milton's *Paradise Lost* lies precisely in those inconsistencies which expose the element of composition.

The notion of a criticism attentive to these inconsistencies provides the main thrust of the larger political discussion of Eagleton's book. Benjamin rejects an historicist conception of history in favour of a conceptual "dialectic" which replaces homogeneous linearity with an irregular history of contradictions and disruptive episodes. For Eagleton, this strategy of "blasting coherence apart in order to salvage them

in their primordial givenness" offers a critical framework which will accommodate the wider semiotic or deconstructionist studies inspired by Derrida and Lacan. Deconstructionism is central to Eagleton's "revolutionary criticism". It is not a system, theory or method but "a particular set of critical procedures" bent upon the unearthing of oppositions within a given object, be it a work of art or historical process.

For those unversed in Marxist dialectic "commodity fetishism" et al., Dr Eagleton's book will be an arduous struggle through dense terminology. Secreted within the esoteric formulas, however, lies a cogent attack on certain of our intellectual assumptions, some fine incidental literary criticism (especially of *Tristram Shandy*) and a commendable attempt to explain the enigmatic relationship between Marxism and post-structuralist intellectual theory.

Michael Wainwright

As the liturgies converge

Religious thought in the Reformation. By Bernard M. G. Reardon. Longman £11.00. 0 582 49030 8. £5.95. 0 582 49031 6.

A generation ago the lines between Catholic and Protestant were still sharply drawn. The liturgies of each religion were distinct, and the separate faiths which those liturgies expressed seemed to have been irrevocably set by the respective theologians of the Protestant Reformation and the Catholic Counter-Reformation.

And yet in our own day we come straightaway upon a paradox. The heirs of those same theologians now no longer talk of two religions, nor even, according to their different traditions, of a true faith or a false heresy. Instead, we have now, albeit with only one or two notable exceptions, all come to recognize that Christians are of one religion and, as our liturgies converge, so too have we come to appreciate that religious thought is again passing through a reformation, but this time one that brings men together rather than divides them asunder.

How has this come about? It is here that Mr Reardon, one of our most distinguished historians of religious thought, writing with great clarity and fairness from an essentially eirenic point of view, comes to our aid. In this excellent new study of the Reformation he does not concentrate on the course of events, nor even on the personalities of those who took part in them. Instead, he looks closely at their conscious religious convictions, showing how it was these which constituted for Luther, Calvin, Zwingli, Melancthon and others matters of absolute importance, no less for themselves than for their Catholic opponents, the great Jesuits Loyola and Lainez, and that attractive liberal Catholic reformer, Cardinal Coudrin.

Mr Reardon shows how, in certain

respects, the modern Catholic Church today is itself not simply a successor to medieval catholicism but also an outcome of the Reformation crisis no less than are the various Protestant Communions. How is it then that they can now come together four hundred years later? Here we come to one of Mr Reardon's most perceptive insights: in his own words, "in the light of the historical critical examination of the authority on which they were based, namely the Bible, the reformers' theological assumptions have faded away. No longer can one scripture text, taken in its literal meaning, be correlated with another to provide the premises of an inferred doctrine, which then, in its turn, is aligned with others, similarly arrived at, to produce a scheme of ideas the very self-consistency of which is regarded as testimony of its truth."

Today, Catholic and Protestant perforce meet again on the common ground each finds in its need for what Mr Reardon calls "an extended historical commentary" if the central dogmas of Christianity are to be made intelligible to modern man.

The reader is taken through fourteenth century German and Flemish mysticism, the fifteenth century conciliar movement, and the humanism of Erasmus, before he reaches the Reformation proper - Luther, Zwingli and Calvin - and its Catholic counterpart, the Counter-Reformation. Along the way Hooker and sixteenth century Anglicanism, for which Mr Reardon gently excuses his own favourable "modicum of bias" is not ignored. After each section Mr Reardon provides ample notes and references, so the reader who wants to can follow up any part of the story in more detail, while he does not hesitate to give guidance where he thinks it is needed. It is this willingness to give firm guidance in what are still major areas of scholarly controversy, that makes Mr Reardon's book so valuable.

Adrian Johnson

Multiple Choice Questions in Advanced Level Economics

Test Development and Research Unit
Edited by A. J. Baker

This book is intended for students preparing for advanced level economics examinations, particularly those where multiple choice questions form an important part of the assessment process. All the questions in the *Student's Book* have previously been used in examinations and therefore give the students a reliable guide to their progress and understanding. The accompanying *Teacher's Book* provides answers to the questions and an introduction to multiple choice testing, together with notes on the individual items.

Student's Book £1.50
Teacher's Book £1.95

For further information and inspection copies write, giving your school address, to Rosalind Horton at the address below.

CAMBRIDGE UNIVERSITY PRESS
The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU, England

Be a Bookworm!

Join the Bookworm Club:

paperbacks for fives to twelves

Please send me details

NAME _____

SCHOOL _____

ADDRESS _____

The Bookworm Club, FREEPOST, Cumbernauld, Glasgow G68 0BR.



Fame from misfortune

All These Hard Luck Stories. BBC1.

Perhaps the most interesting yet mildly disturbing aspect of the recent TV documentary series on social workers and their clients has been the curiously untutored assumptions made by most of the critics. Somehow they seemed to imagine that the many recorded casework confrontations were wholly natural and spontaneous responses to critical human situations; the presence of the voyeuristic cameras have been regarded as only of marginal significance and quickly swallowed into nothingness as the various participants became engulfed in their real life dramas. Yet even the slightest knowledge of "do goodery" suggests that this must largely be a nonsense; indeed the likelihood is that, within the social work setting, film processes almost inevitably become major determinants in the quality of all the enacted exchanges, however "naturalistic" they seem at first.

For those who've not followed the series, let me describe briefly a few of the "true life" scenarios we've been offered, often with quite startling production brilliance. In instalment one, two small abandoned children have just begun to settle down with foster parents when back onto the scene march the offending parents, not only lacking the pleading attitudes of penitence but apparently quite happy to hold up their child rearing defects to an audience of millions.

Then we are invited to follow a sad incident in the life of a pleasant, perky eight year old called Amanda; after necessary removal from her multi-problem home, Amanda is taken one day to meet her mum at an office in the local social services department. The harrowing, tear stained scene that then transpires undoubtedly evoked indignant viewer responses: should such sad and painful intimacy have been exposed to public gaze?

In yet another episode we are incredibly offered the spectacle of a convicted baby batterer happily staring into the cameras and blandly offering threadbare reasons why he should be allowed to look after the baby. He irresponsibly gave to his bemused and emotionally immature girl friend (the social workers ultimately permit him a "visiting uncle" status, which seems to make some sort of sense).

Now there can be no doubt that all the adult clients must have at some level been aware that they faced the possibility of a damning judgment by the viewing audience -

and in the case of the baby batterer the very real likelihood of being "done over" by indignant home ground locals. Yet all on the face of it appeared to be only too delighted at the chance of putting across their side of the story.

Well as that old comedian Sid Walker once used to say - "What do you think chums?" Remember these are almost certainly the nuns and dads who can't be troubled to turn up at school to discuss their children's difficulties; these are the parents who are invariably "out" when "do gooders" and concerned teachers take the trouble to pay home visits. Why then are they so suddenly transformed in outlook?

The answer is surely unavoidable: for the "battered and blighted" of this world, living lives of drab desperation, an opportunity to be "on the box" is, for all its dangers and invitation to acquire the fame and the glory once believed to exist in the Kingdoms of Heaven and Hollywood.

And in this series we are reminded once again of what magnificent actors most clients can really be, given the opportunity; none of them fluffed their lines or gave any of those tell-tale glances into the cameras. Indeed almost instantly they seemed to grasp the atmosphere of the occasion and thought ill-armed with relevant justification for their malpractices, they nevertheless usually managed to give their slightly wooden-styled altruists some exacting and exciting wild goose chases.

And perhaps that, in the end, is why this whole series has had so much greater an impact than one's come to expect from the majority of TV studies of modern philanthropic methods. Mercifully deprived of too many tedious case-conferences and pedantic psychiatric evaluations we're taken straight into the heart of clienthood; and if the occupants are often intractable and bloody minded, they at least know better than most of us that there's probably no business quite like social work business.

Geoffrey Parkinson

IN REFERENCE UNTIL 17 DEC.

RSC

Aldwych

FINAL LONDON SEASON

THE MERCHANT OF VENICE

"John Barton's production - the best I have seen." *Times*

"A brilliant performance by David Suchet (*Shlock*)" *Guardian*

01 836 6404 ext 379 6233

Impressions of Paris seen through the eyes of its painters

This delightful 25-minute film captures the charm and beauty of romantic Paris through the eyes of its painters. It contrasts the City as it was, on the canvases of its artists, and as it is today, in photographs that distill its essential character.

Available free on loan to bona fide societies and organizations. Apply to:

TIME OFF LIMITED
2a Chester Close, London, SW1.
Tel: 01-235 8070.

books

Take one stage-coach to the tea party

Mary Jane Drummond on books for the youngest pupils

One Green Frog. I am an Owl. Wheels Go Round. Methuen £3.25 each.
Ward Lock's Counting Book. Ward Lock's Animal ABC. Illustrated by Peter Stevenson. £1.95 each.
One Sun, Two Eyes, and a Million Stars. By Joanna and William Stobbs. Oxford University Press £4.25.
Farm Alphabet Book. By Jane Miller. Dent £3.50.
One Two Three. Big and Small. By Peter Woolcock. Hodder and Stoughton £2.50 each.
First Steps. Power. Time. Colour. By Jan Burgess and Elizabeth Graham Voell. Ward Lock £1.95.
Push-Pull-Empty-Full. By Tana Hoban. Kestrel Books £3.50.

It's not exactly an original idea, but cutting little holes in the pages of a book must still seem a good one, or so many authors wouldn't do it. Sadly, one gimmick doesn't make a winner, as three new books from Methuen convincingly demonstrate. Small children will love peeping through the holes' wheedle the blubs, but the peep-holes in every page can hardly compensate for the silly verses in *Wheels Go Round* (a variety of wheeled vehicles, with holes for wheels) and *I am an Owl* (same story, with animals, and holes for eyes). The best of this little

bunch is *One Green Frog*, a simple animal counting book (holes for eyes again), but it has none of the flair of *The Very Hungry Caterpillar*, and there's very little to talk about, if conversation hasn't already been stilted by the statutory silly verses. Counting books can be much more inventive, and leave more to the imagination: *Ward Lock's Counting Book* for example. A farmer walks through the countryside, meeting one rabbit, two swans, three tractors... and ten corn-sheaves. Not all the objects to be counted are the same size, shape or type, which makes a good introduction to partitioning and number bonds for the mathematical. The outline of the numeral under discussion is cunningly included in the illustration and so are an appropriate number of ferocious wasps, who follow the farmer through the book.

More ingenious, but finally less enjoyable (especially at more than double the price) is *One Sun, Two Eyes, and a Million Stars*. This counting book shows a day in the life of a farmer's daughter (can't people in cities count?) from dawn to dusk. The illustrations are cumulative, so things are getting a little crowded by the time you reach the page showing 13 rums on one of 12 ladders leaning up against 9 trees in the orchard (and 11 baskets, and 10 pears, and 8 ducks...). But the ingenuity of these over-crowded pictures is spoiled by the sipping colours, printed on a fuzzy criss-cross background. There's plenty to talk about,

but it's too hard on the eyes to linger over each page. If you, or your children, are Richard Scarry fans, then *One Two Three*, by Peter Woolcock, is the counting book for you. Page one sets the tone: "one stage-coach", rolling through a busy scene in eighteenth century Scarry-land; there's a tiger selling muffins, and a bulldog town-crier with cape and bell. But after pages one to ten, the author's desire to educate gets the better of his ability to entertain. Each double-page-spread features an improving mathematical story: the Mad Hatter's tea party, for example, centres on division. "There were 12 pies, there are 4 of us" says the Mad Hatter. "If they had been shared equally we would have had 3 pies each."

Although my consumer group and I were getting a little weary as we trudged on through each of the Four Rules, we cheered up enormously when we came to the same author's *Big and Small*. This is a book of opposites, pictured in rhyming pairs, which sometimes, taken together, make up a little story. Page one is, to say the least, unfortunate, because the two pairs depicted here are "black/white, wrong/right." Turn over quickly to my favourite page, which illustrates the pairs "spend/save, cowardly/brave", the heroes are a seedy band of cut-throats, spending their last greenbacks at a sleazy tortilla stall, kept by the fat, and most villainous of cats. Some teachers, and often I am one of them, are allergic to animals in

fancy-dress, and anyway prefer illustrations that are closer to children's own experiences. What we need then, is Tana Hoban's *Push-Pull-Empty-Full*, another book of opposites, and itself the opposite of Peter Woolcock's book. It is illustrated with effortlessly classy black and white photographs: the eggs in "Whole-broken" and the tortoise in "out-in" are particularly vivid. If you're giving marks to books for the discussion they spark off, then Tana Hoban is near the top of the class. "Is bread, the opposite of toast?" mused one of my testing panel.

Now for the alphabet books; I doubt if they ever taught anyone to read, but they can be pleasant enough. *Ward Lock's Animal ABC* is companion piece to their counting book, and works stolidly through from ant to zebra, though I was not convinced by page 24, "x-ray fish", which are not in my dictionary. Jane Miller's *Farm Animal Book* is less far-fetched, a very colour supplement collection of photographs taken down on the farm, with an unexceptionable sentence or two of text for each picture and letter. Full marks for effort, but somehow not very inspiring.

Designed for an older age-group, with intentions just as honourable, are three new real-life information books. In shape, size and format, *First Steps* are very reminiscent of the Macdonald *Starkers* books; the texts are a little simpler, but do have that familiar disjointed quality, as if

the author were constantly saying "Oh... and another interesting bit. Colour are acceptable, if very predictable, but Power is a book I have often wanted to lay my hands on. The authors set the question "What is power?" and then do a good job of defining and illustrating.

Naively though, I was disappointed to find that Jenny, the little girl who guides us through *Time*, is supplanted here by young Tom. Once I'd realised that, I was only a shade further disappointed to find Tom inventing power in the kitchen, where Mum obligingly mixes a cake. And of course, the pages on petrol show Tom asking intelligent questions. Dad checking the oil, the car belongs. In a way, I shouldn't gripe, since this disappointment was the most intense emotion I've grabbed since I began to read through this little collection. I seem to have uncovered a rigid, if unwritten, rule among those who write factual books for young children: that you must never say anything really funny, or unexpected, or shocking. Or is it the publishers of books for young children who determine the level blandness of the stuff? If you use these information books with young children, don't accept their claims to represent the real world. Please reassure the children that there's more to life than this: there must be!

Over sea, over land to China

Let's go to China. By Sally Mason. Let's go to Israel. By Jonathan Rutland. Franklin Watts £2.99 each.
This is France. This is Spain. This is China. This is the U.S.A. Transworld Publishers 95p each.
Life in Africa. By André Laurent. Life in China. By Claire Julien and Jean-Louis Botscher. Hart-Davis £3.50 each.
Through the Year in China. By Frances Wood. *Through the Year in The Caribbean.* By Dave Saunders. *Through the Year in The U.S.S.R.* By Pamela Barlow. Batsford Academic and Educational £5.50 each.
Russia Today. By Richard Ware. Kaye and Ward £4.15.
Living in Peking. By Wenlan Peng. *Living in Rome.* By Pamela Caramelli. *Living in Johannesburg.* By Richard Gibbs. *Living in Madrid.* By Eliza Selzn. Wayland £3.75 each.
Working. Food. Families. Learning.

The Save the Children Fund and Macmillan Education £1.95 each.
 Twenty years ago it was almost impossible to get reliable information about modern China. How times have changed. Of the six series about foreign countries under review here, all but one have contributed a 1981 title on China, making it possible to compare directly the virtues and drawbacks inherent in each series formula.
 Franklin Watts cater for the youngest readers (7-9) with attractive short books whose appeal lies in large full colour photographs rather than in the simple text with its broad generalizations. At least it does give the modern spelling of Beijing for Peking, unlike the Transworld series of Carousel paperbacks. This large-format series is packed with cartoon pictures and miscellaneous information (including four pages on the Chinese language). No author is credited with the text which in the Chinese book begins with "Incredible Facts" and ends with "Amazing Facts". These nuggets of information

range from the incomprehensible "in ancient China midnight could be any time before dawn" to the speculative "some estimates predict there will be 1,800,000,000 people in China by the year 2000". Information retrieval in this book is non-existent since the so-called index is merely a short list of contents.
 The Hart-Davis contribution to the China symposium was originally published by Hachette in Paris. This is a well-produced hardback, illustrated with good maps, clear line drawings and many interesting full colour and monochrome photographs. The text does not read as if it has been translated and provides a clear and readable survey of all the major aspects of life in modern China. It competes for your custom with another admirable series published by Batsford. *Through the Year in China* takes the reader through the 12 months of the calendar. This provides the unifying structure for what is basically a reference book. An adequate index enables the reader to extract specific information from the text such as the Chinese language (in April) and

education (in September). This is another Beijing book.
 Wayland's *Living in Peking* sticks to the old spelling even though the text acknowledges that Peking is "should now read 'Beijing' in many parts of England but now lives in Peking. Here in the authentic voice of China and her book is a stronger competitor in this field. The other titles in this interesting series are also by authors who either grew up in the cities concerned or who worked there for several years. The illustrations in monochrome convey the atmosphere of these cities, particularly so in the case of *Living in Johannesburg* with its striking photographs showing the effects of apartheid.
Russia Today is aimed at a slightly higher age group. Even so this useful survey of modern Russia could have had greater value for secondary schools had the text been broken down under sub-headings. As it is the chapters are overlong and there is no index.
 Macmillan Education's joint ven-

ture with 'The Save the Children Fund' is 'Designed to widen children's awareness of other cultures, particularly in the developing world'. Gratifyingly the joint publishers have not dealt exclusively with the problems of poverty and famine but have aimed instead "to present a more rounded picture of life in other countries" and aim to "show the similarities and differences between the lifestyles of different nations". This they do most successfully, often employing juxtapositions of short photographs to amplify the short text.
 Of the four titles, *Food and Working* are closest to the mainstream subjects traditionally taught at geography in primary schools but the two books I liked best were *Learning and Families*. The full colour photographs are first class, many of them coming from Save the Children's extensive library of illustrations. At £1.95 each these books are exceptionally good value for money.

Philip Savard

First steps in computer technology

The Penguin Dictionary of Microprocessors. Edited by Anthony Chabod. Penguin £2.25. 01.051.100.8
The Making of the Micro - A History of the computer. By Christopher Evans. Gollancz £5.95. 0575 02913
Introducing Computers. By Peter Bishop. Teachers' Book £1.95. 0 17 431274 1
 Pupils' Book £2.95. 0 17 431273 3 £2.95
 Nelson

There are two approaches to understanding computing. The first concerns itself with the physical realizations of the machines that enable them to perform the services we want of them. The second concerns itself with the conceptual understanding that enables us to conceive

what we want them to do and persuade them to do it. In short there is hardware and there is software. No dictionary of microprocessors would be adequate that was not based on a balanced insight into both and, unfortunately few hardware people have a more than superficial understanding of software ideas and vice-versa. It is clear from the entries in Anthony Chabod's *Penguin Dictionary of Microprocessors* that he is a competent hardware man, but the book would, only be of value in a context where its limitations were alone were needed, or if it was complemented by an equally adequate software-informed dictionary. We really need the combination in one volume, but no editor seems yet to have been able to produce one.
 Christopher Evans is a man who not only understands hardware and software but also how they interact

and challenge one another. Even better, he has a talent for exposition: for stating clearly the ideas that really matter; for providing the reader with a context within which these ideas matter; for choosing examples that resonate for the reader attracting him into the caves of understanding. Only the title is a con. Christ-opher Evans did before he had reached the Microprocessor. We have here a history of ideas demanding physical realization and physical realization sparking off ideas from the seventeenth century to the 1970s. What comes out clearly is the time it takes for new ideas to be absorbed, spread and show their mettle. Since that it brings the cost of the microprocessor down from that of a bus to that of a washing-machine, and nobody knows exactly what effect this will have on our culture, the missing final chapters could not have had the authority

of what we have: a fine memorial for a fine man.
 Peter Bishop has set himself an impossible task in *Introducing Computers*. In his teacher's book, he correctly observes that there are some levels at which computing can be taught in school, some eight particular and five general objectives in doing so, leave aside a dozen other subjects to which it can be applied. A lot of good sense is here for those contemplating how computing should enter their school. But then, in a pupil's book of 150 odd pages, he attempts all these objectives and levels. Some parts are excellent teaching material well presented, but, for instance he proposes an example of a machine-code program, but then fails to give one, and, more important, fails to explain that a CPU can use a machine-code word to choose which of its many instructions to perform. This omission ties

up with a short history of computing that says of Van Neumann no more than that he set out the general principles of the design of a computer. What general principles? For heaven's sake? He is equally uninformative about Babbage's Turing and others. But his introduction to programming (in BASIC) and his choice of example programs are good. Less so is his somewhat prescriptive view of data-processing-department view of how firms fit computers into their operations. But I must commend the exercises which range from receipt of judgments and will take the pupils into the school library and out into the community.

John Lash

Obsessive technology

Neil Munro examines microelectronics development breakthroughs

The announcement early last month by the Government's Scottish Microelectronics Development Programme (SMDP) that it had achieved a "major technological breakthrough" allowing systems to talk to each other coincided with the first public emergence of a new technology in Scotland. The coincidence underlines what for some has come to be a dominant feature of the Government's computer programme in schools, at least in Scotland - an obsession with the technology and too little concern with its educational applications.

Miss Jacquette Megarry, who resigned her post in September as the SMDP's deputy director after only a year, says: "The job I thought I had applied for - helping to integrate computers into the mainstream of education - simply never existed. An initiative of this kind should avoid becoming a backwater for computer enthusiasts and hobbyists. Top priority should have been given to the pursuit of quality in educational software."

"What hard-pressed teachers and lecturers need is material which is not only well-documented and easy to use; it must also achieve worthwhile learning and fit into the mainstream curriculum."
 The Scottish Education Department began supplying computer hardware to schools in November 1979 ahead of the rest of the UK. The SMDP was eventually set up with £1 million budget over four years to guide this work, and it is now responsible for developing computer programmes in 68 projects in about 90 schools and colleges in Scotland. It involves around 200 teachers and lecturers in projects ranging from the use of microelectronics in school administration to applying the technology to school subjects. There were 400 micro-computer systems in Scottish schools in April compared with just over 100 two years ago.

But a confidential report, prepared by the SMDP's steering committee, suggests that all is not well. "The

SMDP has aroused expectations it has not been able to fulfil," says the report, which was written by the steering committee's independent evaluator, Mr Philip Odor, a senior research fellow at Edinburgh University.
 He identified three main areas of concern - inadequate teacher training, feelings of isolation on the part of the schools involved, and disenchantment with aspects of SMDP policy.

In particular, he implies that the SED rushed into providing computer hardware in November 1979 without giving schools time to work out how they were going to use the equipment.

Odor report

"In retrospect," says the Odor report, "a better model would have been to provide awareness courses and demonstrations of material before the equipment was bought, leaving the mass purchase of hardware until later. One benefit would have been that people would be more informed in their arguments for correct configurations of machines, having seen the capabilities of them when running programmes analogous to the ones the teachers wished to use or develop."

The result of the reverse policy, it says, was that the provision of machines combined with a lack of teacher in-service training "had the effect first of raising levels of expectation and then bringing disillusionment which in turn is now setting hard negative attitudes... there is a real danger that (schools) will be unable to overcome the prejudices".

The SMDP is responsible also for promoting the Department of Industry scheme in Scotland, the aim being to put a microcomputer into every secondary school by the end of 1982. That did not have an auspicious beginning either. The D.I. sent letters to Scottish schools inviting them to apply for a grant under the scheme. But it told them to write to Newcastle to the Microelectronics

Programme (MEP), which has nothing to do with Scotland.

The Scottish Education Department's response to all this so far has been that the Odor report was written some time ago (May this year, in fact), that some of the criticisms were very useful at the time, but that many had been "taken on board".
 This is not a view shared by the Education Institute of Scotland, whose members extend to 80 per cent of Scottish teachers. It wrote to the SED on July 31 saying it was "uneasy" about the progress of the scheme and claiming that teachers were "still very much in the dark" about what was going on.

Mr Fraser Dixon, who chairs the Institute's science committee and teaches biology in Orkney, said the introduction of microprocessors to schools was "a hit and miss affair". Development depended very much on the enthusiasm of individual teachers.

"The complaint that comes up constantly is the lack of in-service training for teachers in the proper use of the new technology. We can't simply dump things on teachers and expect them to develop teaching programmes in the bathroom or in the shed late at night," he said.

Mr David Walker, director of SMDP, acknowledged that in-service remained "a big problem" and that "we are relying too much at the moment on the goodwill of individual teachers". But, he added, lack of hardware and software no longer caused the problems they did one or two years ago.

Certainly, technological pyrotechnics appear to be SMDP's greatest strength. The breakthrough announced last month is claimed to be a European first. What it means is that the four microcomputers in use in Scottish schools - Apple, Power, 3802 and Cromemco - can now be connected directly to one another and working programme this could only work if a micro-computer was first connected to a larger machine.

by Victoria Neumark

novel could be improvised in response to public opinion.
 This last novel was painted in even more sombre colours than its predecessor, *Our Mutual Friend*. Even such ripe characters as Mrs Blickeen and Durdles seem to hold their real unpleasantness only just beneath a comic veneer, and such gently humorous ones as Mrs Crisparkle and Miss Twinkleton appear more inadequate as human beings. In a ferocious satire of Sapea the undertaker, whose monument to his wife is a catalogue of his own virtues, and Fanny Under the hypocritical philanthropist, but perhaps most of all in the deep Dostoevskian shadows of the character of Jasper, one senses the flexing of an imagination growing more authoritative in despair.

The contrast between the writer's chlorescuro and the perky commercialism of the advertisements is the most piquant feature of this edition.

Edwin's cliffhangers

The Mystery of Edwin Drood in six parts, with some of the original advertisements. £3.60 plus 30p postage and packing.
 Available from outlets in Kent, and from The Faculty of Humanities The Registry, University of Kent, Canterbury, Kent.

"And with one bound Jack was free..." Unfortunately Dickens never returned to extricate his hero, Neville Landless, from the dark intrigue into which he had been woven in *Edwin Drood*. All we have are the first six monthly parts of what would have become twelve, in which the series was being followed as much by breath as *Dallas* commands. It is a tribute to Dickens' genius that as a disappointment of getting as far as there is with *Edwin Drood* is as great today as it was in 1870.
 Who is the bearded Datchery?

Clearly someone in disguise, but is it the estimable but angular lawyer Greengrass, his enigmatic clerk Bazzard, or the muscular Christian, Canon Crisparkle? Can it even be Helena Landless in disguise? The apparent solution at the end of the six parts we have - that Datchery is about to unmask John Jasper, the opium-smoking organist, as murderer of his nephew Edwin Drood - surely is in many ways the least likely, if we consider the ramifications of plot to be found in Dickens' other 12-part novels. It is interesting that the Faculty of Humanities at Kent use their six-part edition for a discussion on novel endings.

The division of the text into its original six parts, with a selection of reproduced advertisements, does suggest the possibility of getting students to appreciate the impact of the Dickens serial on the Victorian reading public - and to realise how a

Cold warmongering

Conflict Jordanhill Project in International Understanding, Jordanhill College, Southbrae Drive, Glasgow G13 1PP, Scotland

Conflict is a soft-cover A4 book intended to form the basis for course work by 15-16 year olds taking the Scottish Modern Studies O level. It consists of original and reproduced material on four geopolitical "conflict situations": Berlin, Vietnam, Angola, and the overall confrontation between Russia and the USA. According to its producers, it can be used in a variety of other teaching contexts.
 The real question is whether it can

be used anywhere at all. The material is scrappy and uneven, consisting of a jumble of bare texts mixing fiction, argument and "fact" without proper context or explanation. There is a bare page and a half of suggestions for use addressed to teachers, out of which one can piece together the nature and purpose of most of the book. Some heavily biased and apparently made-up passages are included with no indication of provenance whatsoever. The Cold War is surely confusing enough already.

More serious is the book's drastic skew towards the Western military interpretation of reality. In the final and easily the longest section, "World Conflict", we are given a complete issue of *Nato Review*, the

by Martin Goldsmith

official magazine of the Alliance; two long articles reprinted from *Nato Review*, one with no direct indication of its source; another long piece by an ex-UK Permanent Representative to NATO; and an extraordinary paper by the head of policy studies at the Royal Institute for International Affairs which argues that nuclear arms reduction is a threat to world peace. To "balance" all this, there is a single reprint from *Unesco Courier*.
 The other sections are more inadequate than propaganda. Those on Vietnam and Berlin are absurdly inadequate; the section on Angola is not too bad, consisting of briefings in hand with, and in large measure vitiated, and valuable trend towards participation which this pack aims to further.

resources



"Large tracts of land were taken to increase the royal forests, which caused great hardship." Illustration and caption from The Norman Conquest wall-chart produced by Pictorial Charts Educational Trust. Most of the pictures are taken from the Bayeux Tapestry (which was made in England), though the Domesday Book, a map of the six earldoms that existed before the conquest, and an illustration of a Norman castle, are also included. Apart from the enclosure of land for hunting, the teachers' notes suggest that the principal changes brought by the Normans were cultural, social and economic, and that the Normans broke the insularity of the English in politics. The notes also summarise the complicated sequence of events leading up to the Conquest, though teachers would need to use further reference also. Other charts recently published by the same company include *Town Life in mid-Victorian England*, *Mathematical Puzzles and Problems* and *The Towns of Roman Britain*. Most charts are 70 x 100 cm and cost £2.60 plus VAT post free. Pictorial Charts Educational Trust is at 27 Kirchen Road, West Ealing, London W13 0UD.

Decision loopiness

by Nick Thomas

Young People and Decisions: A Resource Pack on Participation National Council for Voluntary Youth Services, Wellington House, 29 Albion Street, Leicester LE1 7ZR

This resource pack, for all those training or working as youth leaders, is intended to develop enthusiasm and skills for the participation in the decision-making of young people themselves. In other words, it aims to teach the trainers to train the leaders to help the youth to help themselves... It consists of a "Training Package" of materials for study and discussion; two pamphlets offering "A Theoretical Perspective" and "A Practical Perspective" on participation; and a short separate paper, "Guidelines for Use".

The whole pack is smartly produced, and clearly the result of deep thought and considerable work (it has all been through practical tests). Unfortunately, it tends to sink under the weight of its theoretical and technical superstructure. Not to put too fine a point on it, the pack is an extraordinarily boring read.

What is more, for a work dedicated to autonomy, and self-

management, it is an extraordinarily controlling production. The time to be spent on each section of each "module" is dictated down to the minute, along with a continuous stream of instructions to trainers and trainees alike. Reading through, one feels as though one is accompanied by the authors with whistles and stopwatches. There is an overall tone of high earnestness combined with horse-doxor's doses of jargon - the New Jargon that plagues the New Professionalism. The course material itself is actually buried within so many introductions, summaries, preambles and afterwords that it is quite hard to find.

This is a pity, because much of the material is warm, human, sensible and involving. It would be much more so without the Participation Scale diagrams, the Decision Loops, the Role-Plays, and the Personality of what are basically very simple issues. It is clearly too late now to reverse the technicalisation of youth work; sadly so, because it goes hand in hand with, and in large measure vitiates, and valuable trend towards participation which this pack aims to further.

SCHOOLS INTEGRATED ADMINISTRATION AND MANAGEMENT SYSTEMS

PIARCO LIMITED

PO BOX NO 7, COATES HOUSE, DALKEITH EH22 2PR
 TEL 031-663 4312
 CONTACT MR RANKIN

Longman Micro Software

- A new imprint which has been set up to provide a source of reliable and fully tested educational software
- All programs are fully documented and can be used equally well by the novice as the experienced micro-computer user
- Additional help is provided by way of accompanying guides and booklets
- Most titles available on floppy disk or cassette for Research Machines 380-Z and Commodore PET. Some other versions also available
- Subjects include Maths, Science, Economics and Geography
- Longman now publish Schools Council Computers in the Curriculum Project materials as complete packages. Titles available: Biology, Chemistry, Physics, Economics, Geography and Home Heating

WRITE NOW for a brochure and official order form to:

Duncan Beal
Longman Micro Software
Longman Group Resource Unit
33-35 Tanner Row
York (Ref TES)

programs with a purpose

ICL CES Computer education in schools

COMPUTER STUDIES — ARE YOU UP-TO-DATE?

Almost all the items in the CES range of books and resource materials have been completely revised within the last three years.

- * New Students' Books
- * New Teachers' Materials
- * New Worksheets
- * New Wall Posters
- * New OHP Transparencies
- * Many Other Items

Send for full details of CES books and materials for Computer Studies:
ICL-CES, 60 Portman Road, Reading, RG3 1NR.

Name
Address

Or call David Roberts on 0734-595711.

extra

continued from previous page

attended by 1,300 delegates from over 66 countries has convinced MEP that the UK is ahead of all other countries, in all its initiatives, and can lead the international field if it is more conscious of self presentation.

A major activity for the Regional Information Centres this autumn is their collaboration with BBC, the National Extension College and with Acorn Computers. They will brief teacher trainers, college lecturers, teacher centre warden and so on, in advance of the BBC television series *Hands on Micros* which begins on January 10 1982, to enable them to act as local support tutors for teachers and others who will be following the series, studying the NEC distance study course, *Thirty Hours Basic* and learning about computers for the first time. Three hundred colleges have registered with the BBC to provide this referral service and there are hundreds more NEC Flexistudy scheme tutors.

The task is huge and MEP will tackle it by first training MEP regional staff in November. A number of BBC Micros will then be placed in each Regional Information Centre and staff will run seminars in December for local tutors. In January the micros will be available for teachers following the series.

The operation is an example of the model of "recursive" or "cascading" training in which the regions will be expected to become involved. Indeed plans are already laid for the first of these regular annual training exercises.

In February of next year each of MEP national in-service training coordinators will run a national conference for two trainers for each region to inform them of the latest technology. It is hoped that these trainers will then run similar courses for other teachers trainers in the regions. The first three "update" conferences will cover Computer Based Learning, Electronics and Control Technology and in Uses of the Computer.

One of these two region-based trainers will be a link-person for MEP guidance and advice in the region.

It is likely that each region will have a link person for each of the four training domains, Electronics and Control Technology, the Computer, Computer Based Learning and for Communications and Information Retrieval. And through that person courses will be run in each of these subject domains in each region.

Since MEP specifies up to 70 per cent of objectives for all MEP INSET courses many new materials will be disseminated through the RICs. This requirement that regions take range of new technology training comes from MEP's fear that many trainers may have a too narrow view of the breadth of information technology, as it effects the classroom.

Over the past four months three advisory committees have been meeting to advise MEP on the objectives, priorities and availability of materials suitable for use in in-service short courses. Their advice will be published as a part of a full MEP strategy document in the autumn. The committees consist of experts in each field and include teachers, teacher trainers, HMI experts from industry and from particular projects.

The committees have been considering Electronics and Control Technology, Computer Based Learning and the use of the computer, which includes computer studies as well as other uses of computers such as in sound synthesis and graphics.

Criticisms of a political rather than an educational nature have stemmed from the DoI's decision to support purchase of two UK Micros for school purchase, despite the fact that no other country is known to support the purchase of non-indigenous computers.

MEP involvement in the DoI project especially in specifying the training aspect of the scheme, is explored in more detail in an accompanying article (see page 35).

John S. A. Anderson is Deputy Director of MEP.

Basic confusions

John Laski argues that the acceptance of BASIC as the main programming language in educational computing is a disaster

The takeover by BASIC as the accepted and almost exclusive programming language in personal computers and educational computing in schools is a major intellectual and educational disaster. We don't yet know all we should want of a language that may serve us during induction into programming. However, long after BASIC was designed, we gained fresh insights into such needs, and these insights are embodied in many later languages.

For those who want recipes, not reasons, let me commend PASCAL. It has faults, but its virtues are many and, most important of all, it is readily available on most microcomputers. But I am more interested in reasons. For knowing why and why not a programming language is worth considering is an essential part of setting up any computer-using course.

To look at the history: in about 1946, John von Neumann observed that the crucial difference between a calculator and a multi-purpose computer was that a calculator could perform only one single sequence of operations, whereas a multi-purpose computer could perform any different sequences. However, for ENIAC, which was the machine he knew, these were defined by the wiring connections on certain particular boards. Each connection would be interpreted to discover the next operation of the sequence. The trouble was that to change the sequence, one had to get out a soldering iron and rewire these programming boards or, at least, take out one set of boards and replace them with another. This was both time-consuming and prone to error.

Von Neumann's great contribution was to realise that, just as the state of some words of the store could be used to represent and be interpreted as numerical data, so the state of other words of the store could be used to represent and be interpreted as the sequence of unitary operations that defined a particular program for the computer.

All subsequent computers were built as stored program computers. There was, therefore, no more physical problem in changing programs than there was in changing the data the program worked on.

But, with the physical problem of changing programs removed, there arose another problem, that of working out, from a knowledge of what one wanted the program to do, what sequence of machine-interpretable instructions would do it. And this problem got worse as machines got larger and faster and what people could think of doing with them got more sophisticated and needed longer and longer programs to be interpreted.

So the notion of automatic programming was born. The idea was to express useful standard sequences of machine-interpretable operations as single human-interpretable steps, so that a program of automatic programming steps could be expanded to the corresponding sequence of machine-interpretable operations. Notice, at this point, that an automatic-programming system worked for one particular design of machine, so that a correct automatic program was one that expanded to a correct machine-code program on that machine.

Then came FORTRAN. This was very successful automatic programming system for the IBM 704. So successful was it at grabbing business for IBM that a group at UNIVAC wrote an Automatic Programming System that would take a FORTRAN program and expand it to a sequence of machine-interpretable steps for their UNIVAC machine.

At first sight, one now has two automatic programming systems with a common input language. But as FORTRAN — and many other input languages — were given compilers to more and more different target machines, it was gradually realised that programs in these input languages had intrinsic meanings without reference to what machine they were translated to, and they began to be called high-level

languages, or just plain programming languages.

That these meanings were made easy to express one's intended meaning started a debate which is still going on well into the next century. It is a debate that is fiercely argued for an important reason: how one thinks and what one thinks about are moulded by the language one uses to express one's thoughts. Whorf originally proposed this for cultures and natural languages. It always surprises me that its analogue in programming languages and programs is not as widely recognised. For it explains why people resist so passionately new programming language capabilities, and why pioneering languages like FORTRAN, BASIC and COBOL still flourish today.

BASIC got its original impetus from the fact that preparing, loading and running FORTRAN was exceedingly awkward. Programs were prepared on cards, batched on to magnetic tapes one machine, carried over to be run on another to produce a batch of output, then returned for printout, often fifteen hours.

The designers of BASIC saw that, with an online system in which program running and program preparation were tied together in an integrated system, a much more user-friendly system was available and that this could be economically implemented by a time-sharing system in which many users shared the machine in a round-robin fashion. This was a major insight and BASIC culture took off and has continued flourishing to this day.

But, as a language, BASIC was below average even for its pioneering period. Indeed, it was well behind FORTRAN 2 in its understanding of subroutines and in the restrictions put on identifiers. The pioneers of high-level languages had only the language of autocode systems to guide them in choosing what features to have, and these depended heavily on the unitary hardware operations of existing machines.

It was only much later, beginning with ALGOL 60 and the LISP school of languages, that people began to explore, *ad hoc*, what to put into a high-level language in order that it should be maximally expressive, easy to think in, easy to write and easy to read. It took a long time to find these things, and they were not found for the cultural, Whorfian reason.

But what does seem to be settled is that only some of the ideas the pioneers took from the autocoders and put in languages like BASIC are worth including, while others are positively harmful, spreading mistakes of potential cross-reference globally through the program. Where BASIC and its fellow pioneers needed and used these other ideas, what they meant could be more perspicuously expressed by less used constructs whose meaning was independent of any other part of the program.

Moreover there were parts of a programming language ("declarations" for the initiated) that were implicit in BASIC and other pioneering languages and therefore never really understood by those who use such languages. And there were methods of describing sequencing and evaluation ("recursion" for the initiated) that were not tolerably complicated to express in the pioneering languages and therefore are never really understood by those who use BASIC.

Finally, most programs written in today's languages are, roughly, half the length of the equivalent programs written in any of the pioneering languages, and half as hard to understand.

The concepts involved in today's languages are so much more difficult to acquire than those of, say, BASIC. Anyone who says they are much more difficult has been caught in the Whorfian trap by language. And, certainly, languages of today enable programmers of any ability to cope with more powerful programs.

In every kind of education programme, from nursery schools to university and industrial training, Apple is the natural choice.

It's the sheer ability of Apple that makes it special. With Apple, you have the option of using PILOT, the language that non-specialist teachers can use to create computer-assisted learning programs. Then, of course there are all the other facilities that makes teaching with Apple more exciting and learning more effective — qualities like colour graphics, sound and music.

On top of that, an Apple system will grow with you as you need it or as your resources allow. And, of course, Apple comes with easy-to-understand, thorough documentation.

With these advantages, it's really no wonder that over 1,000 Apples are in use with schools and colleges throughout the UK, and many more in Universities and Further Education Colleges.

THE COMPUTER LITERACY PROJECT

Apple is committed to the ideal of a new kind of literacy — Computer Literacy. With computers playing an increasingly important part in our everyday lives, it's important to everyone to understand how computers can help improve our society.

Computer Literacy entails understanding computer concepts, gaining 'hands-on' computer experience, and being able to create programs.

To prove that Apple offers all these capabilities and to demonstrate Apple's

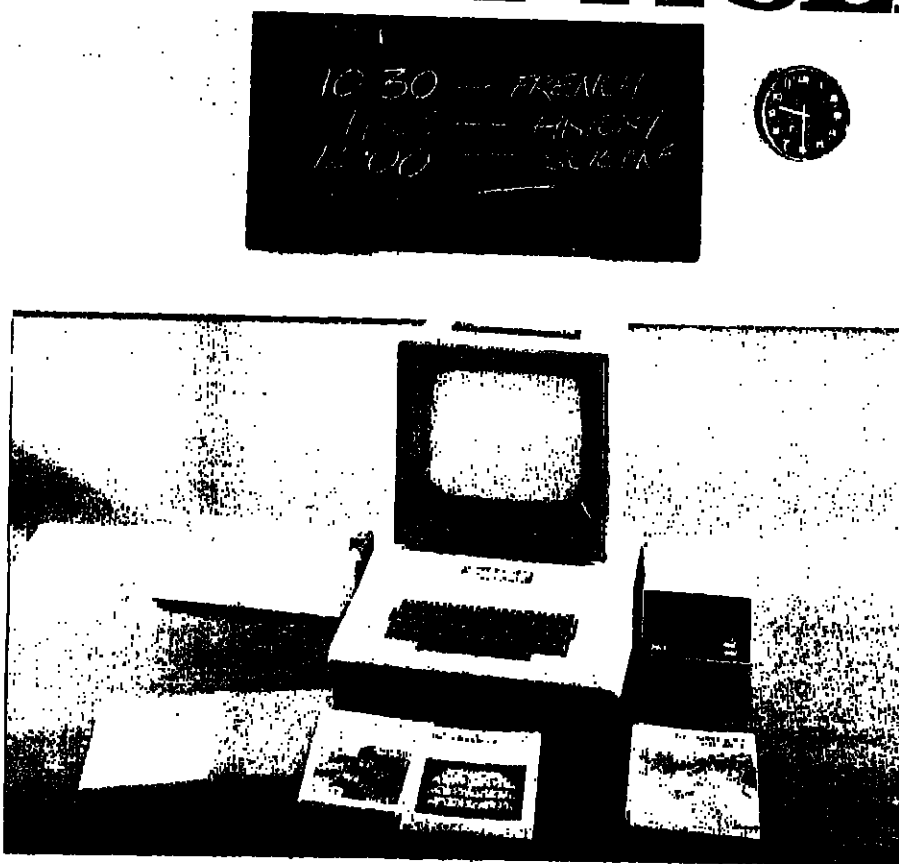
commitment to education, we are — for a limited period — running a very special promotion.

20% OFF YOUR FIRST APPLE...

For any school or college purchasing an Apple System for the first time — Apple dealers are offering a special 20% discount from normal recommended retail prices. This means that our standard education system costs just £1,449.60.

For that you have access to the widest range of readily available software for use in education — subject teaching, computer studies and administration.

APPLE IN A CLASS BY ITSELF



Apple II computer system, including a monitor, keyboard, and base unit, displayed on a desk.

Apple II computer system, including a monitor, keyboard, and base unit, displayed on a desk.

...AND CURRENT APPLE USERS GAIN TOO!

If you are a school or college with an Apple system, you'll know about the capabilities of Apple. And perhaps you were thinking of additional Apples in your classrooms. Well, if price was the only consideration, we're pleased to announce a 10% discount for all schools and colleges purchasing additional Apple systems.

FINALLY A RESOURCE TO MAKE THE MOST OF YOUR APPLE—FREE

The Apple Computer Literacy pack

contains £250 worth of course material to introduce the concept of computer literacy with Apple. And this is available free-of-charge to the first 200 schools to purchase their first Apple system before 31st December.

The Apple Computer Literacy Pack contains:

1. The Show and Tell Kit — answers questions about the history of computers, what they are and how they work.
2. Computers and Education — a paperback covering everything teachers want to know.
3. Microcomputers and Apple BASIC — a simple introduction for the non-specialist.
4. The Computer Discovery Program — a complete course for students in understanding, use and programming of computers. And it's geared to junior and senior reading levels.
5. Applesoft BASIC Tutorial — a classroom set (25 copies) of this manual is included.
6. Apple across the Curriculum. This reference book tells you what programs are available and where to buy.

All-in-all, the Apple Computer Literacy Project provides the material and coursework needed for you to institute a complete course in the understanding and use of computers.

ACT NOW

For more information on this special promotion, just return the coupon. And find out how Apple puts excitement into learning.

* Reductions in recommended retail prices are exclusive of VAT and correct at time of going to press. The 20% discount and Apple Computer Literacy pack are available only to educational establishments purchasing their first Apple computer system. 10% discounts apply to schools purchasing second or subsequent systems. Other criteria 31st December and is subject to demand. Minimum purchase qualification is one Apple IIe processor and one disk drive.

Apple Computer (UK) Limited
Finway Road, Hemel Hempstead, Herts HP2 7PE
Tel: Hemel Hempstead (0442) 416151
24 hour answering service. Telex: 825834 APPLUK G

IMAGINE WHAT CAN BE TAUGHT WITH AN apple computer

Apple Computer (UK) Limited
Finway Road, Hemel Hempstead, Herts HP2 7PE
Tel: Hemel Hempstead (0442) 416151
24 hour answering service. Telex: 825834 APPLUK G

* Apple is a trademark of Apple Computer Inc.
Please allow 4 weeks for delivery and correct at time of going to press.

Please complete this coupon and return it to:

Apple Computer (UK) Limited
Finway Road, Hemel Hempstead, Herts HP2 7PE
Tel: Hemel Hempstead (0442) 416151

I want to know more about Apple and the Computer Literacy pack.

Name:
Establishment:
Position:
Address:
Tel No:

Heinemann Computers in Education Ltd announce their first educational software:

Five Ways Software

This series of resource materials for teaching and learning with the aid of microcomputers sets a new standard in computer assisted learning. The first six packages, widely recognised as of outstanding quality, are for use in secondary schools. They are the first issue from the well-known Computer Unit at Five Ways School, Birmingham and are subsidised by the Government's Microelectronics Education Programme (MEP). They are currently available for the Apple II and Research Machines 380Z.

Designed by teachers, these programs and accompanying teaching notes have been written so that those with little or no knowledge of computers can use the disks with confidence and ease.

The programs

- ★ are challenging and stimulating for pupils
- ★ are relevant to topics in public examination syllabuses
- ★ will support a variety of teaching styles.
- ★ are suitable for both classroom demonstration and individual use
- ★ make imaginative use of graphics
- ★ are accompanied by teaching notes
- ★ are sophisticated yet easy to use — ideal for the naive user

Current Titles

Climate
14-16 years; geography

Scales
11 years and above; science, technology and mathematics

Approximation, estimation, and standard form
11 years and above; mathematics, science and technology

Physiological Simulation
13-15 years; biology

Transverse waves
14 years and above; physics and engineering

Longitudinal waves
14 years and above; physics and engineering

Each disk and teaching notes

£8.50 + VAT

Five Ways Software

Name: _____
Address: _____

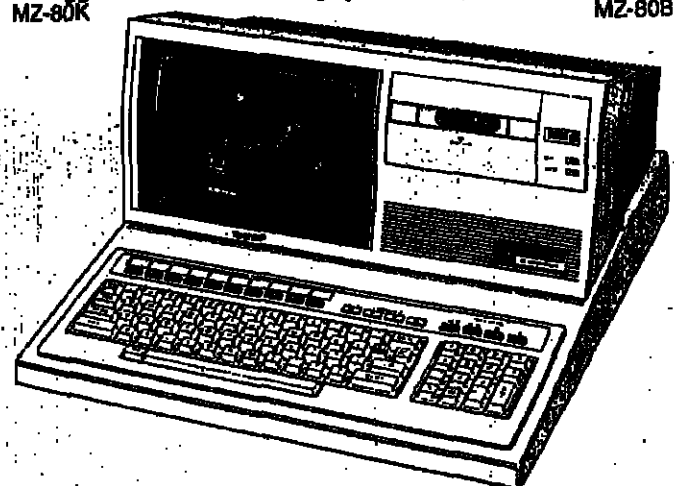
Please send me a ☐ descriptive brochure ☐ order form

Heinemann Computers in Education
22 Bedford Square, London WC1B 3HH.

NewBear Computing Store Ltd

FOR BEST VALUE FOR MONEY BUY A SHARP

★ Rugged MZ-80K ★ Highly Reliable ★ Z-80 MZ-80B



"Our requirements were entirely met by NewBear with an MZ-80B." — Mr S. D. Lawrence, consultant to Notre Dame Senior School, Cobham.

Phone now for a quote 0635-30505

★ NATIONWIDE SALES SERVICE ★

Kindly computer

Victoria Neumark on the Computers in the Curriculum Project

In 1980, the modestly-funded Computers in the Curriculum Project at Chelsea College, supported by the Schools Council and I.E.A.s as well as Chelsea College, suddenly received a dramatic infusion of cash. The DES's Microelectronics Education Programme gave almost a tenth of its budget to one of the oldest pioneers in Computer Assisted Learning.

Sophie McCormick, who is the Project Co-Ordinator, is quick to emphasise that in developing Computers in the Curriculum products the teacher is considered, consulted and re-consulted at every stage. "It is computer assisted learning, a resource for teachers, not computer managed learning, a teacher substitute."

To that end, all the CC programs are in the "friendly" style. You don't have to be a computer programmer to use CAL. "After all," says Mrs McCormick, "people don't feel they need to know motor mechanics to drive a car. (Look at Space Invaders: how many intergalactic hitmen know anything about computer studies?)"

The contrast between the attitudes of students and those of teachers is often striking. Whereas students are confident in setting up microcomputers to run, teachers, daunted perhaps by experience of early jargon-laden software, often hold back. Part of the work of the project has been to involve teachers in planning, writing and editing programs. In trying the programs out in schools, and in in-service training where possible.

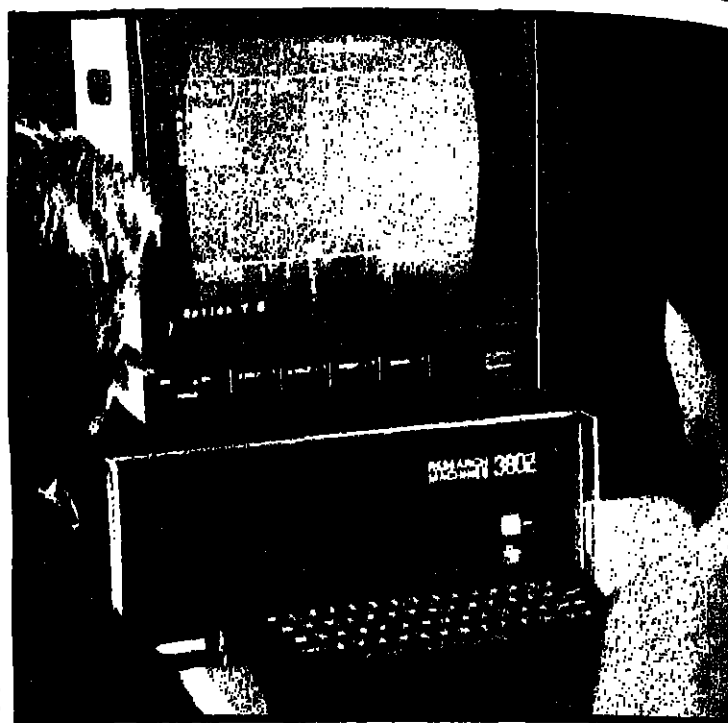
Interaction with real curricula began with the Chelsea Science Simulation Project in 1969. Funded by Chelsea and Shell, the Project distributed programs in BASIC on tape for use in mainstream computers around the world. In 1973 the Schools Council stepped in, and to the original science units, (published by Edward Arnold) were added history, economics, geography, mathematics and environmental studies. These were published through the Schools Council.

In 1977, the microcomputer began to be widely available and even schools which had never had mainframe access bought micros. In 1979, when money was made available for every secondary school to buy a micro, the Microelectronics Education Programme funded the rewriting of the Chelsea Science Simulation Project's materials for the new machines, making use of the improved graphics and the static screen.

Those re-written programs, and the first half of the Schools Council re-written programs, will be published in 1982. Another 60 units will be added to the six subject packs (of about eight units each) and six science simulation units already in the catalogue. Since the MEP funding is assured until 1984, expansion and revision can continue.

Two to three hundred subject packs are currently being sold every month. As each of the eight to ten units which comprise a pack has been costed at £4,000 to £5,000 (or just under a man-year) to produce, the price of between £10 and £20 a pack does not seem exorbitant, even in these stringent times. When it is added that all the Schools Council material is free of copyright, so that the teachers' and students' guides may be photocopied, it seems a bargain.

Style is as important a consideration as price. With the multiplicity of micros now available in schools, a means of producing programs for the RML 380Z, Apple, Pet and Eddy Sorcerer simultaneously had to be found. Unity of style, in presentation and range of illustration, makes use easier and has been the guideline in dividing and publishing a CAL Software Library of subroutines from



Using a mathematics program called PIE, which employs high resolution graphics.

which all programs are to be written. The Library on a magnetic medium, and the accompanying Manual are available at £25; a further edition will be issued free to first edition buyers.

For non-computer experts, the Software Library is a bank of concepts and techniques which you feed into the computer as well as the BASIC language. Different makes of micro will then be able to run identical programs with a few minor alterations. The Library bypasses, as it were, brand differences.

To the user, the key words to be typed are still in everyday English. The parts of the program which are thus called can now be run on an option scheme in which key words enable the user to jump parts of what may be inappropriate in the straight dialogue. You will no longer have to plough through every example if your class has understood the first time.

With all these considerations at the technical end, how does the content of a program get assessed? All round the country, teachers on half or whole day secondment from I.E.A.s or schools meet in groups of six or eight to discuss what contribution computer assisted learning could make to areas of the curriculum which they teach. They pick a subject area, an age group, and a particular topic. This could be, "Disraeli and the Eastern Question" for O level, featured in the CC tape "Choice", perhaps drawing graphs for lower secondary pupils. They try to make the approach as flexible as possible to allow for the differing requirements of examination boards.

When an idea has been worked out it is given programming time, and consultation with a programmer based in the area begins. A proposal plan, a roughed-out program, is presented to a central board composed of members of the central executive and teachers using CAL in the subject under consideration. The proposal is discussed for its curriculum suitability, its appropriateness to the suggested age, and most of all for how teaching of the topic would gain from a CAL program.

If the proposal passes through that stage it is sent back to the teacher or teachers who originated it for detailed specifications for planning. The graphics and options are worked out in a dialogue with the programmer; and meanwhile the working group is roughing out teachers' notes (with answers and follow-up suggestions) and a student guide to fill in necessary background to the program.

Great stress is laid on CAL not replacing experiment in the sciences or research in the humanities. CAL can, however, help to identify areas of confusion, and move away from a kind of learning based on memory. Instead of glossing over a description of Disraeli's wiles and stratagems in a book, the study group follow the policy through a choice of options, measuring what they would do against Disraeli's own actions. Such

a tool can be a boon to a teacher trying to make students sense the dynamic conflicts of state old history. On the other hand, CAL games and programs cannot stand alone. They can be mere diversions unless there is proper teacher mediation.

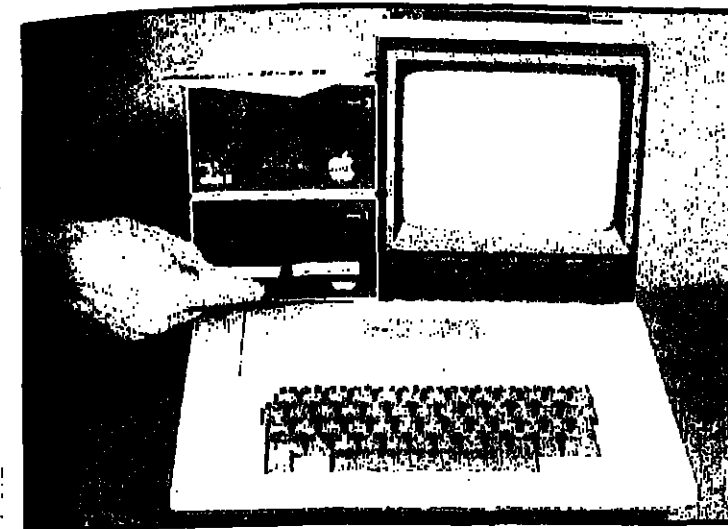
When the notes and computer programs have been co-ordinated for house style, they are sent out on tape for three to six months. Formerly, programs used to be tried out in 30 or 60 schools; recently the Project has been using only 20 or 30 by asking them to record reactions and impressions in depth. If the program passes this stage, it returns to the programmer to be modified technically and for content to the editor. The draft notes are revised and typed up to camera-ready appearance for photo-reproduction printing.

Teacher-contact is maintained with a lecture service for in-service training, an Information Advisory Unit, and a lecturer-training scheme. Videotapes and tape-slides on CAL are to be produced for teacher centres. The project has decided to concentrate on the production of materials, of which there is a dearth. Expansion into the humanities has presented new difficulties, and encountered some resistance. Whereas simulated science was obviously useful to improveverished science departments with no time or money to conduct lengthy or expensive experiments, even maths teachers had tended to regard computer studies as limited in use to computer studies.

In subjects like history or economics where the assumptions on which the working models are based are far more tenuous new approaches were sought. A gaming approach was sought, and a gaming approach that allows for many variables has been favoured for geography. In economics, where the parameters are hazy, and dynamics by which they are interrelated are what is being thought of. However, a computer cannot function without precise parameters. In history, says Dr Dudley on the centenary of 1851 is going to grow schools, and undreamed of opportunities to explore a mass of primary data in the classroom.

This points again to the need for tenet of Computers in the Curriculum. As Sophie McCormick says, there is a danger in using computers without a documentation. Computer assisted learning programs cannot be prescriptive, they can only be used to introduce issues and problems, to stimulate interest and arouse active learning. The current TV software which just "drives in the old thing" does not do that. And you cannot make any resource "teacher proof", CAL may in future be as abused as film projectors and tape slides have been in the past.

In an age of television, of video games and gadgets which encourage passive and idle response to media, the role of interactive, multi-oriented computer programs in education cannot be underestimated.



YOU HAVE AN INVISIBLE GAS
NEXT? 14
R.P. = 20 K 175

NEXT? 3
FORMS AN
EXPLOSIVE MIXTURE 170

NEXT? 0
WHICH ELEMENT (SYMBOL) ? H
CORRECT
THE ELEMENT IS HYDROGEN
FINAL SCORE: 170

ANOTHER ELEMENT ?

A typical configuration and part of a chemistry program showing the question and answer style.

"We are at the beginning of an era" hear it's computers. But if you look problems Mrs McCormick, who sees at the kids, they're confident in setting up of videodiscs incorporating ting up the micros, and they don't film images as the next step for understand how they run. Computers CAL. "Teachers are afraid, they get are just something to use, something exciting which helps the teacher."

Software services

Bob Coates describes the work of two software production units

Until recently there was very little use of graphics and is well packaged with a limited amount of assisted learning (CAL). The production and distribution of good material takes time and involves considerable expense. To assist in the provision of materials the Microelectronics Education Programme has established software production units based at College of St Mark & St John (ITMA) and King Edwards Five Ways, Birmingham. Soon some of the first "MEP subsidised" software will be made available through Heinemann Computers in Education, 22 Bedford Square, London WC1B 3HH.

This material has been developed at King Edwards Five Ways and is only available for disk versions of the Apple and Research Machines (RML) 380Z. There are 6 titles in this first release:

- **Climate** — Multiple-choice questions guide the user through an analysis of data to a conclusion on a type of climate.
- **Scales** — Allows the user to practice readings on seven measuring devices: Thermometer, Vernier, Micrometer screw gauge, Burette, Measuring cylinder, Ammeter. Stop watch.
- **Approximation, Estimation and Standard Form** — Randomly generated questions on the three mathematical (and science) topics.
- **Physiological Simulation** — Allows the investigation of the effect of altering a single variable in a complex system a simulation of body functions involved in respiration and breathing.
- **Waves** — Dynamic models of Transverse and Longitudinal waves allow an investigation of interference, reflection, and beats through the control of important variables such as amplitude, phase, and wavelength.
- **Each of the packages makes extensive use of graphics and is well packaged with a limited amount of assisted learning (CAL).**

All of the packages require 48k on the Apple or COS 3.4 (or later) on the RML, but because of the extensive use of graphics some are only available on the enhanced model of the RML 380Z. There are no plans to make the material available on the Pet, or as cassette versions, but it is intended to adapt material for the BBC machine.

The disks are copy-protected and the programs may not be listed, which means that the user is not able to modify the programs or make security copies. There are only 6 titles (all in the mathematics/science areas), but 14 titles are in preparation for Spring 1982 to a wide range of subjects.

By contrast the Longmans Micro Software, 33-35 Tanner Row, York YO1 1JP, is not copy-protected, is available for Pet, Apple, RML 380Z on disk or cassette. The material currently available is:

- **Janeplus** — a flexible way of presenting a picture of numbers changing under the simple operations of addition and multiplication.
- **Biology** — Three programs which simulate (a) Monohybrid cross, (b) Dihybrid cross, and (c) all the crosses with Drosophila that a teacher might wish to use from O level to S level.
- **Chemdata** — Allows the investigation of the patterns within the periodic table through an interactive process.

● **Basic Microeconomic Models** — A series of macro-simulation computer models developed at Heriot-Watt University Edinburgh.

● **Running the British Economy** — Presents the opportunity to find out what effects your choice of monetary and fiscal policies would have on the economy.

The material is accompanied by printed support material including teacher's notes and pupil work books. The cost, £12.50 — £18, represents an unsubsidised price for production and distribution.

Even though we have had to wait for the developments in software production to catch up with those in hardware production the situation is beginning to improve as more publishers realize the need to become involved with the development and distribution of quality material. The United States has led the field of educational material for quantity following massive investment in production, but I am convinced that the United Kingdom is setting a standard for quality.

There are also several non-commercial groups who provide useful software and ideas. These include:

- **Advisory Unit for Computer Based Education (AUCBE)** — 19 St Albans Road, Hatfield, Herts AL10 0HU.
- **Bristol Polytechnic** — R Margets Bristol Polytechnic, Coldharbour Lane, Bristol BS16 1QY.
- **Central Program Exchange (CPE)** — Polytechnic of Wolverhampton, Wulfruna Street, Wolverhampton WV1 1LY.
- **Geographical Association Package Exchange (GAPE)** — Department of Geography, University of Technology, Loughborough LE11 3TU.
- **MICE** — Dr M Edwards, Polytechnic of the South Bank, Borough Road, London SE1.
- **MUSE** — Freepost, Bromsgrove, Wors B61 7BR.

Could You Teach Cookery With Just One Stove?

Put Yourself in the Classroom of Tomorrow - Now!



landy
The Biggest Name in Little Computers

The practical solution to using multiple systems in a teaching environment. No special commands required, no modifications to your curriculum. Just connect to the **LANDY NETWORK CONTROLLER II**. Equipment Specification: Central Unit: 16K TRS-80. Independent student computers: Minimum 16 computers. Network Controller II: 640K RAM. Simultaneous load to all computers. LED display of student status. All computers can support separate printers. Individual computers can report to central computer.

APPLICATIONS:
Secondary Education: Modelling mathematical functions, interpretation of islands experiments, Economics, Statistical Analysis, School Publishing, Computer Science.
Higher Education: Word Processing, Business Management, Data Base Management, Computer languages, Visual.

Please send me your TRS-80 catalogue. Education Department, Landy Corporation (Branch UK), Tame Valley Tower, Bridge Street, Walsall, West Midlands WS1 1LA.

Name: _____
Address: _____
Postcode: _____

NEW

Microcomputers in the Classroom

Alan Maddison

This book meets the need for a sound, practical introduction to the uses and applications of microcomputers for teaching across the curriculum and for administration. The book includes sections on computer hardware and software, using the computer for learning and for organisation and evaluating a program.

0 340 27688 6 May 1982 Paperback £3.95

Computer Studies

G M Croft

Designed to cover all GCE O level 'Computer Studies' syllabuses, this book will also be found useful by CSE students or those meeting the subject for the first time. The emphasis throughout is on data processing, and file handling is covered in some detail. A particular feature of the text is that worked answers are provided for many examples from past O level papers.

0 340 26899 9 July 1982 Limp £3.95

Learn Computer Programming with the Commodore VIC

L Carter and E Huzan

This book provides a practical grounding in BASIC. Using the Commodore VIC — a new computer which can be used in the home, at school, in offices and laboratories — the authors explain how to write, develop and test BASIC programs. No knowledge of computers or programming is assumed and a comprehensive series of exercises, with answers, is provided to help the reader learn at his own pace.

0 340 28707 0 January 1982 Paperback £1.95

Teachers are invited to write for inspection copies

Hodder & Stoughton

Hodder and Stoughton Ltd, FREEPOST, Dept E24Z, Dutton Green, Sevenoaks, Kent TN13 1TY

Pitman announces the only genuine introduction to microcomputers yet published

Microfuture

John Shelley

An important new work, likely to be quite as successful as its companion volume *Computer Studies: A First Course* by Shelley and Hunt, which has sold nearly 30,000 copies since its publication in June 1980.

Inspection Copy Order Form

Please send me on approval so I may consider it for class use:

- ☐ *Microfuture* 0 273 016768 / Price £2.95
☐ *Computer Studies: 1st Course* 0 273 01272X / Price £4.25

Name _____
 Teaching Position _____
 School/College _____
 Address _____

Please send this form to: The Inspection Copy Department, Pitman Books Ltd, 39 Parker Street, London WC2B 5PB

Pitman Books

extra

The ever-growing market

Martin Banks on new microcomputers, recently launched or expected.

Whatever the long term benefits of the Microcomputer in Schools scheme, introduced earlier this year by the Department of Industry, school teachers and administrators continue to be confronted with a bewildering range of choices in microcomputer systems.

The DoI's support scheme for getting at least one microcomputer into every school has won as many brickbats as it has accolades for being restricted to just two UK manufactured systems — the Research Machines 3802 and the Acorn BBC micro. The accolades have centred on the good that can come from a Government Department actively supporting British industry. The brickbats have centred around the scheme's apparent denial of an education marketplace that already uses many other system types.

The systems available can be broadly divided into two main groups. These are the low-cost, low-capability systems that are now being aimed at the genuine personal user market that is emerging, and the higher cost, higher capability machines that are primarily intended for the fairly well defined small business type of market. These two groups can be broadly equated with the needs of the education marketplace, where the former provide the maximum number of systems for a given cost, while the latter offer greatly increased capabilities for such functions as computer-aided learning and administrative work, but which normally entail a greater investment.

In the first group there have been several new product introductions this year of interest to the educational user. There have also been one or two re-launches of older products.

It is a group that is still only poorly defined, for the manufacturers are still trying to synthesise the correct mix of selling price, functional capability and marketing approach that will truly open up the market for a genuine personal computer in the same way that a market was developed for pocket calculators. The factor over which they have the most control at present is price and there is a tendency for some systems that are available to be engineered down to a price. This means that the choice of system in this area can be a little chancy.

Perhaps the most famous in this area is the Sinclair ZX81, the lowest cost microcomputer worthy of the name that is currently available. Much has been written about this machine already and both its good and bad points have been extensively charted. The introduction of a printer for the system however, has extended its usefulness considerably. At a retail price of under £50, this electrostatic unit means that a viable — if limited — computer system can be purchased for under £120, plus the cost of a television for display purposes. Sinclair Research are also starting to aim at the education market specifically. The company has just launched the ZX Learning Lab, a suite of 20 programs that demonstrate the techniques of programming the ZX81. The Lab comes as a set of eight audio cassettes plus a manual, for £20.

The latest entry into this sector of the microcomputer market is the Commodore Vic-20. A younger, and currently less comprehensive brother to Commodore's highly successful Pet microcomputer, the Vic-20 has to be a serious consideration for the large number of schools that have already committed themselves to the older machine, for it offers the crucial factor of a broad level of software compatibility with the Pet.

At under £200 it costs less than half the price of the smallest version of the Pet, yet includes features not available on the older machine. The major one is colour graphics. A total of 24 colours can be used on either a domestic colour television or dedicated monitor display. Eight of them can be specified by a single key-stroke. The Vic also incorporates three tone generators that each cover seven octaves. Playing through the television loudspeaker, these provide the system with an obvious application in the teaching of music.

Though in its minimum configuration the Vic-20 has only limited data storage, it can be expanded up to the same level as the Pet and, like its older brother, it can also be equipped with optional disk drives for additional data storage and a printer, making it a well rounded system.

Two microcomputers were this year re-launched into this sector of the market. The first was the Newbrain portable machine. This had been developed by Newbury Laboratories and was first introduced some eighteen months ago. At the time it was well received, for it incorporated several innovative ideas and had an attractive price tag of around £250. Among the innovations was the combination of a relatively comprehensive micro computer with true, battery-powered portability. A combination of factors however, including manufacturing difficulties, meant that the Newbrain never actually made it on to the marketplace.

Now, however, the system has been taken over by Grundy Business Systems with financial support from the British Technology Group. It has always offered considerable potential for educational users, and now that it is back in manufacture it could well become a serious contender for any updated version of the DoI's support scheme.

The other relaunch came from Texas Instruments and concerned the TI99/4 machine. When it first appeared over two years ago it was something of a disappointment, for although it featured capabilities such as colour graphics and speech synthesis, it could only be used with a television working to the American NTSC colour standard. For potential UK users it was therefore significantly over-priced, at around £1,000, as a TV had to be purchased specifically for the machine.

Now Texas Instruments have equipped it with a TV interface for the European PAL colour TV system and at the same time savagely cut the price. At £280 it is still more expensive than its competitors, especially as the speech synthesis is an optional extra. Because the requirements of the marketplace for the second group of microcomputers are more clearly defined it is here that there has been more activity and product launches.

Like the first group, there has been the inevitable 'stars' that have appeared during the year and one of the most prominent amongst them has been Apple III, a system that was launched in a blaze of publicity and high hopes in the middle of 1980. It then nearly disappeared under the weight of design and manufacturing problems Apple Computer had with the system.

Now the problems have been solved, Apple III is in manufacture and it has been formally re-launched. The major target market is the small business area and many of its features are specifically designed to meet the needs of that sector. One of those features concerns compatibility of applications programs written for the immensely popular Apple II (estimated to be second only to the Commodore Pet in UK educational installations). Though Apple III has an entirely different and more

comprehensive operating system to control its internal workings, it can be set to emulate the Apple II and run its programs.

This could well interest many educational users for the systems' greater capabilities — much bigger memory and data storage and faster processing for example — will make it an attractive proposition. Not only will it be able to work with existing programs, it will be able to handle the more complex requirements of computer-aided learning work within a school curriculum. This requires a computer with a more comprehensive processing capability and much more data storage than is found on the small systems. Several of the small business systems could handle it. Computer-aided learning systems got a major boost with the development of the Plato system by Control Data. This used a large central mainframe computer to drive a number of individual user terminals on which the tutorial programs ran. With a mainframe system providing the power, Plato was anything but cheap, so earlier this year the company launched a Micro-Plato version, based on the earlier system's user terminals equipped with a single floppy disc drive to run the programs.

Another factor that is growing in importance in education is the use of computers to handle aspects of a school's administration. It is based on the quite logical assumption that a more and more low-cost computing power enters the classroom, some of that processing power ought to become available for other necessary functions.

One such company is Comart, which has both its own product line and acts as a distributor for several US manufactured systems. Its own product, called the Communicator, has recently been enhanced by the incorporation of a high capacity hard disc storage unit. Like the other system Comart handles, the Communicator uses the CPM operating system and a wide range of existing software is available for the machine.

In terms of price competitiveness and reliability — factors of great interest to educational users — one of the most potentially important new entrants comes from Japan. Until the middle of this year the biggest Japanese company in the fray was Sharp. Now NEC has joined them with its PC8000 series machines. Like many popular systems this is modular in design, being based around a minimum configuration of a keyboard and processor console, and a video display. It can be expanded to include a printer and up to four floppy disc drives however, the NEC aims to maintain price competitiveness with Apple II and Commodore Pet systems.

The big one for the future comes from IBM, the giant of world computer manufacturing. It has launched its own system called, accurately enough, The IBM Personal Computer. The system is technically innovative, making use of one of the latest microprocessors to give it excellent performance and great expansion capabilities.

Its only current drawback is the lack of applications program packages. This is likely to change very quickly, however. When it does appear in Europe, it is also likely to have a very attractive price tag.

Are you prepared for the Second Industrial Revolution?

If you want to help yourself and your students cope with the eighties — become micro-minded now! Stop wondering what to do about it, 30 hour BASIC provides the answer. This is the computer programming course specially designed by us for the BBC Computer Literacy programme being broadcast in January 1982. It's practical, mostly in simple English, with a few abbreviations and symbols. BASIC is chosen because it is the language all micro's use. You could be making your own programs within a week. Our correspondence course starts in December, cost £30: a self-instructional book is also available.

For further details, write to the National Extension College, Department T, FREEPOST, Cambridge CB2 2HN. Tel: (0223) 318844.

Name _____
 Address _____

Computer bus

Susan Thomas on Bedford's answer to the problems of providing sophisticated computing facilities for schools

The bellands of Bedford are famed for other things than the gracious house and the stinking brickworks. First it was the R 101, then the Blenheim and the Flying Bedstead, all major technological achievements in their time, now it is the Bedford computer bus which is attracting attention in the world of educational computing.

A deceptively simple idea — a drive-in, plug-in classroom, equipped with all the facilities for an A level course and including a highly qualified teacher — it was the brainchild of Ron Denny, the county's CDT adviser. Originally trained as an industrial designer, he was a principal lecturer at De La Salle and adviser with Hertfordshire before joining Bedfordshire five years ago. Finding himself faced with the problem of providing high-powered, computer-aided design technology for relatively small numbers of pupils spread over a number of schools, he produced a radical solution.

"Industry is crying out for engineers trained to think creatively in the design office and on the shop floor" he says. Although that is really only true of electronics and aerospace at the moment, economic survival will depend on innovation and both will be impossible without appropriate educational back-up.

Ron Denny's answer was to fit out a mobile classroom/laboratory with the sort of equipment a school can't afford in any quantity, and a first class teacher and give it the backup support of advisers, technicians and industrial contacts, and then share it between half a dozen schools.

It was a proposition that no sane head or education authority could refuse and, operational since the beginning of term, is a regular feature of in-school playgrounds.

It is a well matured, ex-London bus, now sleek and shining, with professional external graphics courtesy of a 14 year old graphic communications student Ouflet and professionally refitted by the team of technicians at the Ampthill Design Technology Unit. It is part classroom, with bus seats, table tops and OHP, part laboratory, a continuous ribbon of sockets running behind the workbenches, storage areas for Kims, Logic and Nandgate boards, Fischer Technical, Hybridex and other components. There is a silent pneumatic generator at the front, a hydraulic power unit at the back, and midway a tensile testing machine on loan from a local school. The lab area is modular, on one side computers and automation, on the other electronics.

Space is tight. "They pass things under than walking around" says Mike Hopkinson, advisory teacher and bus driver.

The bus is designed to take five pairs of students and a teacher. School staff can be timetabled onto it as part of their in-service training. The bus arrives at a school, plugs into the sockets installed on the outside wall, and it's all systems go for half a day. "We fitted 'no volt release' switches" explained Roy Baker, Advisory Teacher and the third member of the squad, "so that there was no risk of losing the computers

if someone inadvertently switched us off and we had a power surge." The computers — all Acorn Atomics live on the bench tops.

Mike Hopkinson reckons to take the lower sixth through computer logic in about a month. They start on the Logic boards (as used by Essex University) getting to grips with binary logic sequences and Boolean algebra, next they use the Nandgate boards for the hexadecimal system and then the Kim microprocessors. By this time they are ready for machine code and specific problems.

As soon as they are easy with the Kims they move onto Acorns. Into BASIC and begin writing programs on the screen. Once they are conversant with computer logic they are launched into real, or at least miniature life, modelling with Fischer Technik and Hybridex and using the program to switch in the pneumatic or hydraulic power systems.

Simple robotics lead to problem solving exercises, perhaps "A small factory uses a conveyor belt to carry objects of various sizes and colours" design a system which can select the full blue ones, transfer them to another belt and stick a label on them."

At Bedford's John Bunyan school, where Kath McKenzie, the acting head waxes enthusiastic about the bus and the progress that it had made possible, I saw some of her A level students in action. Their projects included a flight simulator, a robot arm for a fume cupboard and a device for firing practice tennis balls, all powered pneumatically or hydraulically and programmed by the Acorn.

Predictably, the project has aroused a great deal of interest and increasing numbers of able students are choosing to take the Cambridge Technology A level along with their Maths and Physics. At the moment, the Computer Bus does a four-day week in school, on the fifth it goes back to the Design Technology unit where the team run day-release in-service training, as well as evening courses.

There have been no real teething troubles. By concentrating the county's resources in a mobile unit it has brought the latest in educational technology into the schools for the minimum cost (much of the hardware was already in central stock — most of the software is written by the students).

Mike Hopkins' role as a peripatetic teacher with weekly access to six schools, allows him to pool their corporate skills and resources, coordinate approaches to industry and generally keep things running smoothly.

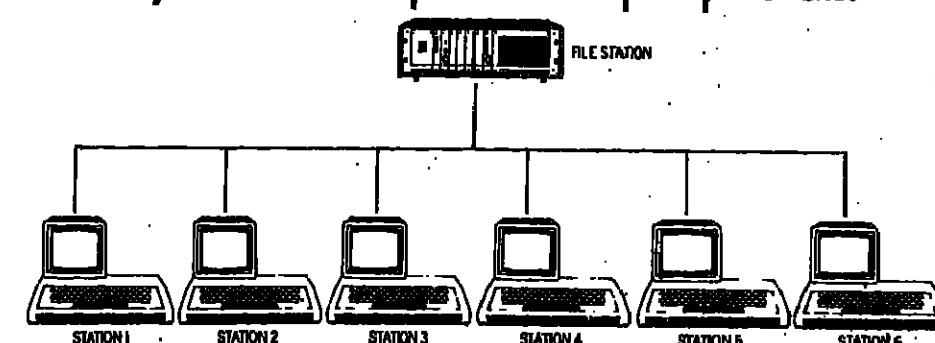
The Bedford mobile unit is a dynamic solution to the conflicting demands for highly qualified teachers in a new subject, expensive and constantly changing equipment and economic stringencies. It is a solution which Ron Denny is happy to explain to any other county or for that matter, country. (German educationists have already been.) And it has the added merit that when things begin to look dusty you can nip in to the nearest bus depot for a wash and brush up.



Above: conducting a lesson in the bus. It can accommodate ten students and two staff. Below: a sixth former at the John Bunyan School, Bedford modelling a device to protect tennis balls.

THE ACORN ECONET

The new low-cost interconnecting communication system for computers and peripherals.



"To our knowledge the Econet is by far the lowest cost network available in the world."

A ten station network with 400K byte file station costs around £3,000 and then as little as £50 for each additional station interface.

WHAT THE ECONET DOES
 The Econet communications network system has been developed to enable up to 255 Acorns and/or other systems to communicate with each other almost instantaneously and to share facilities such as disks and printers. The network is totally democratic. All stations can communicate with each other independently unless specifically prohibited by a data transfer rate of up to 250 Kbytes. Any station can be set up as a master station with an ability to define priorities and open or close facilities to subordinate stations. The master station can however communicate with all stations at once or singly.

HOW THE ECONET WORKS
 All the stations on the Acorn Network are connected together in the network by ordinary 4-wire cable. There is no specific direction of flow of data; the network simply ensures a path between any pair of stations. 1. Before transmitting on the network a station listens until the network is free. 2. If two stations transmit simultaneously the 'collision' is detected by a circuit on each station's Econet interface and both stations stop transmitting. 3. After a collision is detected, each station causing the collision retries immediately, or abandons the attempt and continues listening until the network is free again. The course of action taken is determined by a 'collision-resolution' algorithm ensuring that no two stations go through the same sequence of actions. In practice these procedures give very efficient use of the Econet, with the minimum number of retries. During the time that two stations are in communications the network is kept continuously busy, so there is no opportunity for another station to interrupt and cause a collision. Once the conversation is finished the network is released, and other stations waiting to use it will again compete to gain access to it.

ECONET'S ADVANTAGE OVER TIMESHARING
 Each Acorn station costs less than a typical terminal on a timesharing system. Each station runs programs at maximum processor speed; extra still isn't lost in the system down. Each station is independent; a fault on one station doesn't affect the others. The Econet is far more flexible than a timesharing system. Extra facilities can be added as self-contained units.

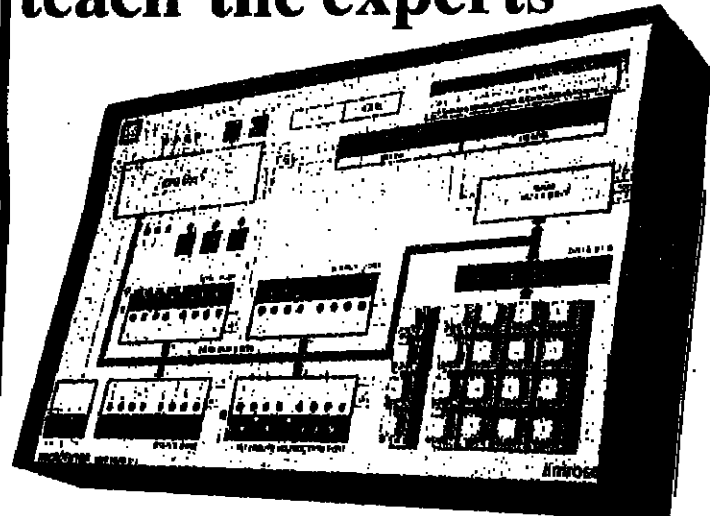
ECONET WITH OTHER ACORN SYSTEMS
 Any Acorn Eurocard System or standard Acorn can be added. Computer hardware modules fit easily inside the Acorn. ARDM carries the software for low level network commands. Sophisticated file server/printer server software is available. At its lowest level the Econet can be fitted to two Acorns only.

FIND OUT MORE!
 For comprehensive information about Econet simply fill in the coupon below and post it today. Full details will be sent to you straight away.

ACORN COMPUTER Acorn Computers Limited
 4a Market Hill, Cambridge CB2 3NJ

Name _____
 Establishment _____
 Address _____
 Postcode _____
 Telephone No. _____

Here's Microprocessor know-how... directly from the people who teach the experts



Limrose Microtutor MPT 8080/K-1 is not just a learning tool - it is an 8-bit microcomputer with a real microprocessor, the 8080, with 1K bytes of RAM, a powerful Front Panel, and Input and Output Ports. You can programme it using the built-in keyboard, and in Assembly language and micro-BASIC using the expansion modules.

With the Limrose Microtutor you can run your programmes at the full processor speed, or single step them as you like. You can examine corresponding states of the Data Bus, Address Bus, the Status Port and Input/Output Ports to develop a thorough understanding of hardware/software interaction in programming of microprocessors.

The Microtutor, and the accompanying step-by-step Instruction Manual, form a comprehensive "Self-study" course. This course can be used by teachers, engineers and scientists to develop a thorough understanding of microprocessors and how they are used in product design.

Several thousand Microtutors are already in use in Universities, Polytechnics, Technical Colleges and Colleges of Further and Higher Education throughout the UK as well as being used extensively by industrial and MOD training establishments such as British Telecom College of Engineering studies, HMS Collingwood - Royal Navy, Marconi College, REME, etc.

limrose electronics
AERIAL ROAD, LLAIS INDUSTRIAL ESTATE, WREXHAM, LL20 0U, U.K.
Tel: 01924 (097 600) 65556

Basic Statistical Computing

D. Cooke, A. H. Craven and G. M. Clarke

A text discussing the ways in which a microcomputer may be used to understand and carry out statistical analysis. Algorithms are listed for standard statistical procedures.

£5.95 approx paper 160 pages January

Computing Science

D. C. Palmer and B. D. Morris

... starts from first principles and aims to cover current syllabuses in computing science. Generous format, good, comprehensive text. - Times Educational Supplement

£8.95 paper 400 pages

Business Data Processing and Systems Analysis

Pete Kilgarinn

A complete revision of the author's *The Student's Systems Analysis*. The book has been completely restructured into three modules: business systems; business data processing; and systems analysis and design.

£7.50 paper 332 pages

An Introduction to Computer Hardware

Martin Cripps

'No teacher of introductory computer science can afford to ignore this text.' - Computer Bulletin

£4.75 paper 136 pages

Numerical Analysis

the mathematics of computing

W. A. Watson, T. Phillipson, P. J. Oates

An introductory text describing how to find accurate approximate solutions to a wide range of numerical problems, with the aid of an electronic pocket calculator.

£5.95 paper 224 pages



Edward Arnold
41 Bedford Square,
London WC1B 3DQ

extra Unfulfilled potential

Ron Jones on microcomputers in primary schools

It is too early to be able to assess the role of microcomputers in the primary sector with confidence and accuracy because many teachers and those in authority are not yet attuned to the need to introduce to young people of primary school age such sophisticated tools especially at a time of financial constraints and against the background of the clamorous calls of 'back-to-basics' and 'core-curriculum'.

Many of the computer experts who were brought up on main-frames and minis have not yet adjusted to the potential of microcomputers with very young children - for I doubt that any of them have had training at primary school level. Many are only using the computer in computer studies, mathematics and perhaps occasionally spilling over into the sciences.

Moreover most experts are almost exclusively involved with the highly sophisticated and therefore expensive microcomputers such as the RML 380Z which will remain beyond the reach of most primary schools in this country for many years to come - unless market forces and Government subsidies allow. That is if you believe it to be a suitable machine for young fingers!

A survey in March 1980 revealed that only 31 primary schools possessed microcomputers in England, but since then the numbers have increased considerably. In an effort to pull together these scattered pockets of experience, to co-ordinate and support their work a national organization MAPE (Micros and Primary Education) has been created. It aims to promote and develop the awareness and effective use of micro-electronics as an integral part of the philosophy and practice of primary education.

It is worth noting the absence of the word microcomputer from the organization's title and from within its aim. Microcomputer is but one aspect of the microtechnological world that we are entering.

The organization, which is currently establishing a regional infrastructure broadly corresponding to those regions being set up under the Microelectronics Education Programme (MEP), will be open for membership on the 1st January 1982.

Enquiries should be made through the Secretary, Barry Holmes, at St Helen's School Bluntham, Cambridgeshire. (A S.A.E. would be appreciated.)

Support for primary schools is also coming from the MEP. The team was quick to recognize the needs of the primary schools and appointed one of its managers, Bob Coates, with a brief to help and support initiatives within that sector of the Education Service. It is through MEP sponsorship that a series for primary school teachers has now been prepared and is being printed by the Council for Educational Technology (CET).

In December 1978 the Council issued a slim pamphlet, *Microelectronics: Their Implications for Education and Training* (available free from CET, 3 Devonshire St., London W1N 2BA). It was the following four challenges from that statement that served to stimulate a number of primary schools into taking action:

● What can we do to help people to prepare themselves for a rapidly changing society?

● What can we do to help people fit themselves for employment in new and technologically advanced occupations?

● What can we do to help people to fill their leisure hours - whether the result of a reduced working week or the enforced leisure of unemployment?

● What can we do to help people maintain their self-esteem when there are no jobs for them?

The booklet's conclusion is pertinent:



nent to the present circumstance:

"But there is not unlimited time. If change is coming it will come with unprecedented speed. We need to think and to act with courage and resolution."

There is no doubt that introducing young children to the world of microtechnology through the use of microcomputers is at least a step towards meeting some of the challenges issued by the Council. The challenges are only challenges and are wide open to interpretation - which is vital when entering an unknown world.

Support has also come from a most unexpected quarter, the British Broadcasting Corporation. The BBC's launch of a major new project in the field of computer literacy in January 1982, whilst not specifically aimed at teachers, will undoubtedly attract them with its aim of "introducing interested adults to the world of computers and computing and to provide the opportunity for viewers to learn through direct experience how to program and use a microcomputer."

The project, is built around a ten-part television series, and includes a book, a linked microcomputer system complete with User Guide, a range of application programs and an associated course in programming in BASIC provided by the National Extension College.

It is the provision of direct experience based on the BBC microcomputer which could be of immense importance in primary schools. The BBC's specifications for the BBC microcomputer are such that because of the mass market appeal, the price for even the enhanced version of their machine should be within the cash limits of the majority of schools - especially if the Government could be persuaded to treat primary schools with the same generosity as it is treating middle and secondary schools in their purchasing of the British machine.

The BBC initiative, based on the idea of computer literacy for all so as to avoid the creation of a computer elite, will undoubtedly have an effect on how the micro will eventually be used within primary schools. At the moment primary schools are at an evolutionary stage in the use of microcomputers - the majority are not yet committed and are awaiting developments. Some of this exploration will lead teachers into blind alleys but this is inevitable in such a period of transition.

The 'safe' and obvious area of mathematics was first to be explored and has been quite successful -

almost too successful in that the micro has often been imprisoned in an existing mathematics syllabus. Other teachers have ventured into the language and literacy areas of the curriculum with interesting results. Both groups have brought a new dimension to 'core curriculum' teaching.

The microcomputer is also well suited to science and the humanities - especially in geography and history. The children also need the skills of listening, of evaluating and of valuing, of organizing, and of problem solving areas which still await exploration. Some tentative work has begun through using microcomputer simulations and games, with excellent results. Here is an intellectual and practical challenge for any group of teachers.

Teachers will need to be competent and confident in the use of microcomputers if they are to carry out such exploration. Such training should be provided very soon either by the BBC course by L.E.S. where INSET has survived the savage local government cuts, or through MEP Regional Activities.

To allow the role of the microcomputer to break through subject boundaries and to develop, all primary school teachers need to be made aware of the program design features so admirably identified by the (TMA) Project team based at the College of St. Mark and St. John in Plymouth.

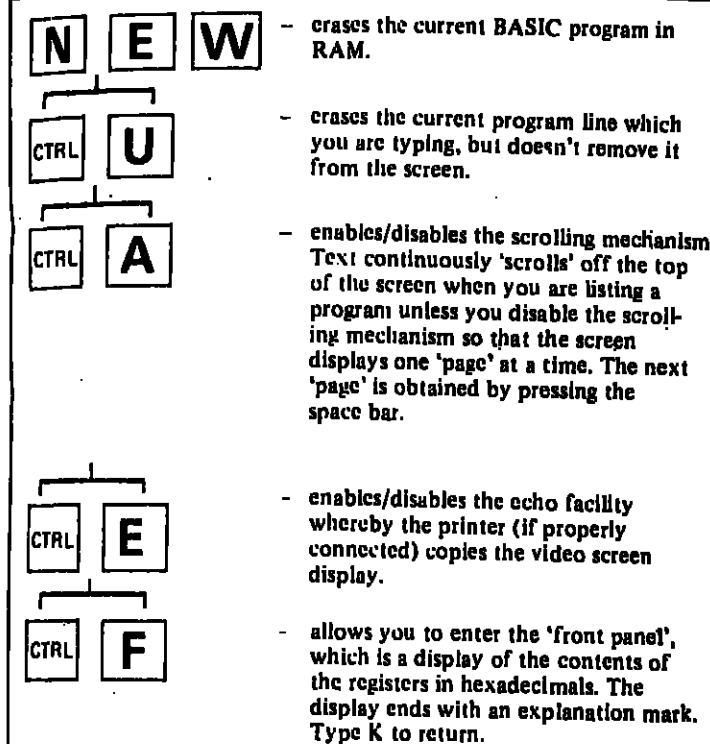
Teachers need to realize that the micro has such versatile talents as speed, graphics, animation, randomization, selective input, timing control and external device control. That programs can be made to have the human attitudes of humor, warmth, praise, criticism, stress and infinite patience. There are many styles and tactics available, such as games, simulation, competition, etc.

Teachers can become aware of these factors without becoming computer programmers but to enable the education service to tap the wealth of talent and experience of teachers there has to be a dialogue between teachers and professional programmers, who will then become educational 'encoders' along the lines pioneered by the Primary School Group of South Fumbeside under the leadership of their active and enthusiastic Primary Adviser.

R. Jones is Headmaster of 'Mape School and Chairman of MAPE. However the views expressed in this article are personal and do not necessarily reflect the views of MAPE Steering Committee.

extra Training INPUT

John Anderson and Bob Coates on an induction programme for teachers



The Microelectronics Education Programme was funds were never intended to assist schools in hardware purchasing, but to promote teacher training, develop new software and to find a way of spreading very scarce expertise a long way in a short time. Frequent early applications from wishful thinking schools sending thousands of pounds to build up their hardware stocks were turned down. When the Department of Industry conferred with MEP about their Micros in Schools scheme it was welcomed as complementary to MEP's work, with one proviso: those schools entering the field for the first time must train a minimum of two teachers. The MEP team produced a detailed four-day, twenty-six hour course outline. This course, and the associated wealth of supporting materials, were to become known as INPUT.

The course aims first to introduce teachers to the RML 380Z microcomputer and second to describe a range of microcomputer applications. The package is only an appetizer and hope is that teachers on the course may influence their colleagues. The content of the course package is designed to this end, in that it does a post course study element for the teachers. Moreover, it is hoped that material being developed for MEP by the Open University will also satisfy demand for training activities. The package has been distributed to each local authority which is running courses in order to qualify teachers under the Department of Industry assisted purchase scheme.

The principle underlying the INPUT course materials is one of a flexible resource which can be applied to the wide variety of training environments which are bound to occur. Clearly the content of the course has to be specified, and some tutors will need help in organizing the activities. However within certain limits, tutors can adapt the INPUT materials to suit their own needs. The materials come in three categories: Tutor materials, Teacher materials and a Machine pack. What follows is not a detailed description of the contents, only a mention of some of the elements. MEP felt that it was important that teachers should have a good CAL software for a cross section of subject areas. For this purpose a disk is included which contains some well known published software and also several programs which have never previously been made publicly available.

A role-play exercise called 'Ye Innovation Game' is presented in an attempt to stimulate teachers into discussion concerning the social and economic implications of the intro-

duction of new technology. The MEP philosophy is that the computer as a machine is relatively unimportant. The way that classroom teachers employ the technology is much more significant. The INPUT course is aimed at a wider audience than those teachers who sadly, because of their subject disciplines, are more likely to be elected by headteachers to attend a course on computer awareness.

The purposes for which computers are being used in schools are wide-ranging. For this reason, a tape-slide sequence has been prepared explaining the use of the RML 380Z in the control of simple devices. The item describes the work of Peter Andrews and his team at AUCBE in Hatfield. They have successfully created a series of cheap kits which enable children with virtually no theoretical knowledge of the subject to complete practical control tasks which have obvious applications in the wider environment of industry and commerce.

There are two readers which contain articles covering a spread of technical and non-technical topics. The subject matter ranges from management problems for schools introducing computers for the first time, to the classroom uses of Prestel.

Teachers' materials also include four posters, information sheets known as MEP "Yellow Pages" (including latest details on the MEP information services), and an unusual but interesting device, which is described as a "Machine Pack". The main feature of this is an easel designed to stand beside the computer and provide a step-by-step, clearly illustrated, jargon-free guide to its operation. Each page has a specific instruction, and the user unfamiliar with the machine rapidly gains confidence as the pages are turned. The reverse side contains a simple introduction to BASIC for those who wish to learn programming.

Response to the package has been very favourable. Tutors from local authorities and training college lecturers running recognized courses have responded warmly.

There have been requests for the materials from France, Germany, New Zealand and Ireland and MEP is considering a reprint of the most successful elements of the package and the adaptation for other makes of machine. The production of an edition for the BBC Microcomputer is in an advanced stage. Details are available from MEP Regional Information Centres where the INPUT course materials may be inspected. The entire package was produced and distributed by Tacmedia, a company of educational consultants in Loughborough.



LEARNING MACHINE

There's a great deal more to educational computing than simple programming or the computer studies syllabus.

A school's micro can also be a stimulus to learning, a practical teaching aid, a research tool, and even an administrative assistant.

The 380Z was never anything else.

It's a work-horse of a computer, engineered for the classroom, rugged, reliable, easy to use, simple to operate. But that's the only concession we made. For the rest—processing power, facilities, versatility, and specification—it is targeted at the graduate research scientist.

And that's what makes it the right choice for schools.

Schools need the 380Z's power and resources to get the best out of the good Computer-Assisted Learning packages now available.

They need the flexibility of a computer which is equally at home as a general teaching aid, or controlling an experiment in the lab, or providing hands-on experience of real computing.

They need the capacity of a system which will keep pace with a child's appetite for discovery and rapid development of skills.

So we based the 380Z on a combination of the 280A microprocessor and the CP/M operating system. That means access to the widest possible choice of software. We provided VDU and TV monitor outputs, because both are essential to classroom work. We gave it the best graphics available, to make learning really interesting. We added a range of interfaces so that it will handle experimental control as easily as a computer peripheral. And we made it readily enhanceable on-site, so that it can grow as your school's computing requirements grow.

The 380Z's range of facilities has made it a natural choice of research workers throughout the UK. Its computing capability ensured its inclusion as one of the very few British micros on the CCTA's list of approved micros for use in government departments. And its value in education was confirmed by its selection for the DoI's 'Micros in Schools' scheme.

It's hardly surprising, therefore, that students and teachers in over 2000 schools are already enthusiastic and committed users of the 380Z.

Isn't it time you found out what it could do in your school?

RESEARCH MACHINES
ANALOGUE AND DIGITAL SYSTEMS

RESEARCH MACHINES LTD Mill Street, Oxford OX2 0BW. Tel: (0865) 40741

'ADAM' THE APPLICATIONS MICROPROCESSOR FOR CONTROL TECHNOLOGY

★ **HARDWARE MODULES FOR HOURS OF APPLICATIONS PROGRAMMING**

★ **COMPREHENSIVE INSTRUCTION MANUALS**

★ **SEND NOW FOR DETAILS OF THE SPECIAL INTRODUCTORY OFFER**

L.J. ELECTRONICS LTD

9, Francis Way,
Blyththorpe Industrial Estate,
Norwich NR5 9JA



14-15/11/81

extra Management objectives

Jenny Boswell reports on a new school management system

Educational computing abounds in acronyms. SIAM stands for the Schools Integrated Administration and Management package developed by a Scottish company called PIARCO. Whatever the literal expansion of PIARCO, it has stood for a quality: it handles absence and attendance records; pupil records; requisitioning, funding and ordering; budgetary and payment control; in the last few years as a collaborative exercise between the company and two senior teachers at Bannockburn High School, near Stirling. However, the problems of school administration which it addresses are by no means peculiarly Scottish, nor are the solutions which it offers.

The system has only just gone public, but PIARCO are already receiving enquiries from all over the UK, and also from abroad. Although it was developed independently, the basis of the system's approach to timetabling is very similar to that published by Salt through the National Foundation for Educational Research.

The rector, Tom Wyllie, and his deputy, Alan McKinnis, have been enthusiastic timetabling collaborators for some time, and by 1976 they had worked out a sophisticated system which adorned their offices with myriad multi-coloured pegs marshalled over large areas of peg-board.

The system covers many aspects of administration other than timetabling: it handles absence and attendance records; pupil records; requisitioning, funding and ordering; budgetary and payment control; inventory control; staff records; and accommodation records.

The combination of all these with the timetabling capability adds up to a comprehensive and coherent approach to school management problems. Not only will this help to rationalise and optimise the procedures described in the apparently obligatory teachers' handbook, but the inclusion of a full professional wordprocessing package will also ensure easy production of a letter-perfect version and effortless updates.

These, then, are the claims; but is a computer really necessary to assist in school management? The advantages of word processing systems are becoming widely recognised for their ability to produce perfect-looking results in the hands of amateurs, and to derive various versions from a basic circular or document.

Certainly schools need include appropriate applications like letters to parents with variations for certain groups of pupils and automatic retrieval of addresses from the records. A good school secretary is too valuable a resource to be used to copy type the staff handbook each year,

for instance. By the same token, the developers of SIAM argue, teachers trained for higher things should not be spending upwards of 30 minutes a week filling in registers and trying to balance the numbers. Their system not only accepts absentee information at any time and in any order, it also analyses the information in a variety of ways according to who wants it - class teachers, guidance or house staff, or even the local authority. It also traces and analyses patterns of absences, 17 Monday absences in the last 6 months take some explaining.

The attendance system has obvious links with the main pupil record system which collects basic core facts like addresses and dates of birth, and also optional material which the user can specify, so the system can be tailored to the needs of the school or authority. Nine types of listing can be specified - for example by emergency contact or by attendance record - and the format can also be varied, so that names can be printed out in 3-column triplicate (cheaper than photocopying). This information, too, can be related to the data bases on curriculum choice and careers information, as well as to the timetable.

The requisitioning, budgetary and payment control keep track of different types of funding and constantly update the school inventory as orders are fulfilled. A check can be kept on departmental spending before orders are executed, and the system detects orders from different departments for the same supplier. This alerts the school to possible discounts for bulk purchase and dispatch labels can even be sent to prevent possible confusion over deliveries.

After orders are placed, progress can be checked against delivery dates and prices and quantities can be matched before payment is authorised. The inventory control system is linked; it does not merely record holdings passively according to category, it actively monitors minimum levels of consumables for re-order and notifies service intervals for hardware items.

Two other systems - the accommodation records and staff file - provide important inputs to the main timetabling system. Teacher information includes basic factual material like subjects qualified to teach and whether full-time or part-time; thus the staffing resource available for each subject can be fed into the timetabling system. Similarly the accommodation records show which rooms, specialist areas or features (eg black-out) are available, as well as containing useful information ab-

out First Aid kits, fire points and telephone extensions. The essence of the timetabling system is simple, though its details take time and attention to grasp. At its heart is the curriculum matrix: this contains all the information about the combination of teachers, subjects, classes and rooms which satisfy pupil options without conflict and within the constraints of the school's accommodation, teachers and requirement of periods per subject per week.

Once this had been established, the next step is to give block allocations to heads of departments so that they can assign specific teachers and rooms to classes. These choices are fed back into the system which can then - without further human effort or human error - produce timetables in various forms - by teacher, department, room, class or even pupil. Apart from avoiding problems like the apocryphal A level Spanish class caused by ink-blot, the system boasts three main advantages over manual timetabling:

- It is much quicker, perhaps 40% of the time usually needed. PIARCO's Managing Director Ron Rankin estimates that for a 60-teacher, 300-pupil school, phase 1 (input of subjects and resources, evaluation of possible fits and conversion to block timetables for heads of department) would take about 6 hours and phase 2 (keying in 10,000 to 15,000 characters of specific information received back) would take a further 10 hours.

- The quality of the timetable is better. Because the program systematically finds and evaluates all the thousands of possible solutions which satisfy the requirements, the school's priorities, its teachers' preferences and pupil choices are more likely to be optimised than on any manual system. The temptation for many a deputy head is to start from last year's solution and tinker with it so as to avoid having to start again from scratch. Even in the unlikely event that last year's solution was ideal, changes in the intake, staffing or option choices make it probable that a fresh approach may be needed.

- It is more flexible. The system makes it easier for a school to test out and, if appropriate, implement major reorganisations in its timetable, for example, to accommodate curriculum reform. With less than 3 hours' staff time, Bannockburn produced a third year structure in which an integrated credit/general/foundation pattern was

emerging in accordance with the recommendations of the Munn and Dunning Reports, without disturbing the traditional division into certificate and non-certificate groups in fourth year. While innovation-weary teachers might regard this as an exercise in futility, it is nevertheless a good illustration of the system's capacity to take change in its stride.

It is hardly surprising that all this sophistication does not come cheaply, and the memory requirements of the system could not be met by a microcomputer like the increasingly familiar PET. PIARCO's recommended package costs around £10,000 including a suitable small computer with all the necessary working memory and storage capacity (including a back-up data cartridge so that all the school's records can be lost by mistake) together with a visual display unit and a high quality printer. For an extra £3,000 or so another visual display unit and floppy disc facility permit simultaneous wordprocessing, perhaps in another room; the system can be expanded to take additional terminals as far as funds permit.

However, in a climate where some schools cannot provide paper for exams and the jitters have run out, these figures will inspire much humour. It is possible, however, that consortia of schools may club together to purchase such a system on a co-ownership basis for timetabling applications. Alas, however, such shared use would dissipate many of the advantages of an integrated system dedicated to one school as there will be peak demand periods at certain times.

The immediate future of the system is more likely to lie in its tremendous potential for training in school management. Colleges, polytechnics, universities, local education authorities and others involved in in-service teacher education would be short-sighted indeed not to evaluate this remarkable system which must be set fair to come into its own when the economic climate eases.

The experience at Bannockburn so far is that the training possibilities are considerable, certainly with heads of departments and their assistants. One firm of management consultants observe that most firms receive the benefits of computerisation more when preparing for it than by installing the machines. Their advice is now to rationalise the procedures as if about to computerise without actually going to the expense of doing so. Most teachers and administrators could learn a tremendous amount by exposure to this system whether or not their schools could actually afford to buy it.

The attitude of Bannockburn's local authority - Central Region - to this home-grown development is not yet clear. They have made heavy financial commitments to another secondary school administration project with the acronym of SCAMP; this also has backing from Fife Region and the Scottish Education Department, and the total public funds invested in it over the past 3 years (including staff salaries) are estimated well into 6 figures. Nevertheless, Central are also showing interest in the private enterprise product which has so far cost nothing to rate-payers or tax-payers.

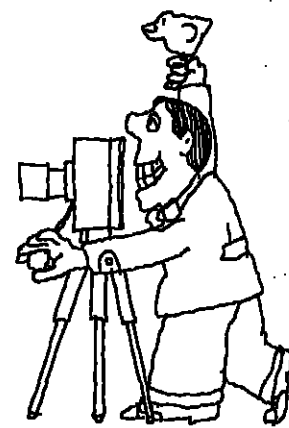
Rector Tom Wyllie emphasises that SIAM is not in competition with SCAMP as the two systems address different problems: SCAMP concentrates more on the admissions systems and marks processing. However, it seems inconceivable that any school would want to use both systems and doubtful if an authority would wish to participate in both for a sustained period. A choice between the product of state subsidy and private enterprise seems inevitable before long.

Curve of disillusion

Jack Cross puts the case for realism

There was a time when you had to be a bit of a technician to take a decent photograph. You were expected to know something about apertures and exposures and had to duck into the cupboard under the stairs just to change the film. Now cameras, like tape-recorders (and video) and washing machines, can be used by anyone; high technology plus market forces have made the most sophisticated instruments idiot-proof. And the same, I believe, the advertisements, applied to microcomputers; any office which has a calculator, any home or school with a television receiver, is just waiting in install a micro.

As far as businesses are concerned, they may well be right. Certainly Dr Peter Woolliams thinks so.



and, as he is in charge of computing at the Anglia Regional Management Centre (where they have more floppy disks than books), he ought to know. But, as an educationalist, he has a warning for all those teachers who have - via the DES, DfE, their school's PTA or capitation - got their hands on their first microcomputer.

"Beware of over-expectation and prepare to experience the curve of disillusion... and to overcome it. This will not come from the hardware (the parts of the machine you can see and touch); the device are getting more efficient and less expensive and there is a 50% government grant for first-time educational purchasers. The trouble is that good software, the actual teaching material, is in very short supply."

What then about all those teachers who are so busy writing programs for Maths, Music and Metalwork, the dedicated groups who get together in their local techs and institutes, like I.E.A.s which have set up ambitious computing centres; the national network announced by the DES as part of its microelectronics development programme? Are there not organisations like MUSE (Microcomputer Users in Secondary Education) which aim to set up libraries to provide "a range of educational material to run on a variety of computers at a realistic price"? Surely someone, somewhere, is writing a program to fulfill almost any educational need.

The first problem is to find a program which fits your course. The second is that when you think you've found it, it may not suit your computer, nor may it speak a language that you or your pupils can easily understand. Each model has its own operating procedures and these can vary even between different marks of the same breed. All that up-dating and so forth, the teacher layman who simply wants to use the micro as a teaching aid. The most common computing languages, like BASIC and FORTRAN, have accented the

continued from previous page
selects, introducing strange software can be like bringing someone with a thick Glaswegian accent to talk to children in Suffolk.

"What is wanted", says Dr Woolliams, "is a mainstream of available, logical, powerful and portable programs... and it does not yet exist." The schools may want it but education is not yet a significant market force. Computer companies have no interest in inter-company standardization; specific software is an important part of their sales package. So there are loyal PET, TANDY, APPLE and RML 380Z populations who depend on programs which are not interchangeable. Neil Macfarlane, when Parliamentary Under Secretary of State at the DES, summed up the situation when he said, "Much of the material which exists is not sufficiently accessible, either because its existence is not widely enough known or because it was developed for a particular computer and requires adaptation if it is to be usable with different apparatus."

Many teachers (and probably more pupils) are capable of making such adaptations though the results are commonly for internal use only. This is because of "The Hooper Effect", named after the ex-Director of the Council for Educational Technology. It states that if it takes x hours to develop a program for one's own use, it takes at least 20x hours to make it "portable" and about 100x hours to provide the manuals and documentation necessary to make it universally useful. Few classroom practitioners have such time to spare. Consequently most teacher-produced programs resemble the more familiar teaching aids - workbooks, slides, transparencies and filmstrips - as resources only useful in the lessons of the person who designed them. Such products are to be regarded as lesson-notes are to published textbooks.

There is considerable teacher-resistance to the idea of machine-based learning, even, says Dr Woolliams, on business training courses where computer applications are mandatory. Perfect programs, designed for "naive-users", do not satisfy those who:

- feel they threaten their status and authority
- worry they may introduce questions which they are not competent to answer

● sense that the machine takes over direction of the lesson there is no turning back to repeat a message that needs to be reinforced. When, however, teachers, in particular, suffer from mathematics-orientation and computers have been identified with that subject. Pupils are not automatically impressed by the presence of a console and VDU, any more than they are enthused about television in schools. Many of them, experienced in handling electronic toys and Space Invaders, are more sophisticated than their teachers. They don't ask "How does it work?" (which is probably just as well) but "How much will it do?"

Yet these problems do have to be overcome. The government is correct in emphasizing the need for general familiarity with computing in a high-technology society. Pragmatic teachers are more concerned to ask what the micro can do for them, their lessons and the children they teach. John Mann, of the Schools' Council, has provided one of the best answers. "If there is anything which we have been trying to do in schools for years and significantly failed to achieve it is in the field of bespoke learning (each individual following a separate course at his/her own speed) and learning in groups. This is the kind of thing which the computer can handle very well."

So, for educational as for national reasons, it is important for teachers to bypass the curve of disillusion or to climb out of it as soon as possible. To do this they will have to be realistic about their expectations and about the choices they will be required to make.

If offered a choice of microcomputer, they should be more interested in the software which it can handle than the machine itself. They should shop around for courses which will help them to prepare material which is compatible with the devices they use and get together with colleagues from their own and other schools to prepare more. Every authority has one or more centres, some of them (like Birmingham) using peripatetic teachers for in-school advice and support. Most polytechnics and institutes of higher education run loan and copy services though, if they are like the Anglian Management Centre, they prefer users to do a short

course on how specific programs work on appropriate machines. If they run into any snags, there's usually a fifth-former around to help out. A visit to any of the many computer-conscious schools around the country will reveal plenty of evidence to confirm the estimate made recently in an article in *Microcomputer Printout* that the average age of the British programmer is about 14.



Teacher resistance

extra Library information system

In order to help teach tomorrow's information users the basic procedures for handling these systems the British Library has awarded a series of grants, totalling approximately £50,000 over two years, to develop a microcomputer based information retrieval system for use in secondary schools and to assess its effectiveness. It is intended that the system will demonstrate to school children the basic principles of information storage and retrieval and provide a practical system which can be used in the classroom to locate teaching and research materials. This system is known as SIR (Schools Information Retrieval).

The project is being carried out by the Research Department of ASlib in collaboration with Dr A. Kent of Kent-Barlow Information Associates, who has written the software, and Mr A. Payne, a teacher from the Oriel Grammar School, Great Yarmouth, who has specialized in microcomputer applications in schools.

Eight schools will participate initially. A retrieval system has been installed in three schools - Isleworth & Syon, Middlesex, Fairham School, Nottingham, and Bosworth

College, Leicester - and the additional five schools will be introduced to the project this term. The project team will supply each school with a complete package comprising specially written software, user manuals, and a small demonstration database of about 600 items on current world problems. The team will give training to staff in the schools involved.

The software has been written to run initially on a Research Machines RML 380Z microcomputer, a machine chosen because of its wide use in secondary schools in the United Kingdom. Three of the participating schools will be lent a microcomputer by the British Library Research and Development Department and other schools may be given assistance to up-grade their existing equipment to the requirements of the project.

* ASlib (formerly the Association of Special Libraries and Information Bureaux) is an organization concerned with information and library problems, whose membership includes a wide range of learned, professional, special, and public libraries and commercial organizations with an interest in information.

PICK OUR BRAINS



The Sharp PC3201. The Sharp MZ80B. The Sharp MZ80K.

The computer created for business and industry, incorporating a screen for crisp, clear information, a twin disc-drive printer to enable you to keep everything in black and white, and a C.R.U.

The computer that offers the educationalist and the scientist many of the features previously associated only with larger, more expensive products.

Here is the versatility you need to handle a huge range of software and hardware applications.

The computer designed for improving efficiency in small businesses, widening the learning spectrum in educational establishments, and adding to the pleasure for the home enthusiast.

Please send me further information on the:

MZ80K ☐ PC3201 ☐ MZ80B ☐

Name

Address

Tel.

SHARP

First, and foremost

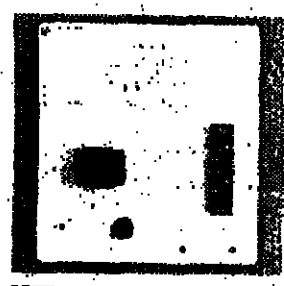
Sharp Electronics (UK) Ltd., Sharp House, Thorp Road, Newton Heath, Manchester M16 9BE. Telephone: 061-205 2333.

Now teach the next stage with your micro

The pure mathematics operations have been mastered, you've played it at chess, business information has been analysed and printed out.

Now for the next stage: the monitoring and control of other equipment. These working applications of the microprocessor function are becoming even more important in full computer courses, and Feedback's new range of MICA interfaces and modules provides immediate hands-on experience in analysing programming and operating models of real life applications such as traffic control, heating cycle control, diesel

generator and many others. Each module comes complete with manuals suitable for classroom instruction or direct use by the student.



FEEDBACK

Modules:
MIC 251 Automatic Washing Machine £74
MIC 252 Diesel Engine £74
MIC 253 Shopping Motor £79
MIC 254 Temperature Control £132
MIC 255 Traffic Control £148
MIC 256 Binary Input Output £106

Interfaces:
MIC 044 TET £71
MIC 045 ADJ £45
MIC 046 ADJ £45
MIC 047 ABC 80 £107
Note: prices are ex VAT

You may order in the Feedback order form or by telephone. Please send for a detailed information sheet on our microcomputers.

Name
Position
Organization
Address
Telephone No

INDEPENDENT

continued

English

Heads of Department

DEVON

EXETER SCHOOL

Head of Department Post. 600 on

Full time. Salary £12,000 p.a. plus

allowance. Applications to the

Headmaster, Exeter School, Exeter

EX1 1JH. Closing date 15.12.81.

25th November 1981. (24776)

184418

LONDON

KING'S COLLEGE SCHOOL

Applications are invited for the

Head of the English Department

at King's College School, Strand

London WC2R 2LS. Salary £12,000

p.a. plus allowance. Applications to

the Headmaster, King's College

School, Strand, London WC2R 2LS.

Closing date 15.12.81. (24776)

184418

PETERBOROUGH

KING'S COLLEGE SCHOOL

Applications are invited for the

Head of the English Department

at King's College School, Strand

London WC2R 2LS. Salary £12,000

p.a. plus allowance. Applications to

the Headmaster, King's College

School, Strand, London WC2R 2LS.

Closing date 15.12.81. (24776)

184418

Other Assistants

LONDON

LATYMER UPPER SCHOOL

Applications are invited for the

Head of the English Department

at Latymer Upper School, Uxbridge

Middlesex. Salary £12,000 p.a. plus

allowance. Applications to the

Headmaster, Latymer Upper School,

Uxbridge, Middlesex. Closing date

15.12.81. (24776) 184418

KENT COLLEGE, PEMBRUY

Tunbridge Wells

The Board of Management for Methodist Residential

Schools and the Governors of Kent College invite

applications from experienced graduates who wish to

work in a Christian foundation for the post of

Head of the English Department.

The post will become vacant on 1 January 1983 following

the retirement of Miss Margaret James, B.A.

Kent College is a girls' school comprising 356 senior girls

at Pembury and 130 junior girls at Autmores. 200 of the

225 boarders are in the senior school. The Head lives in a

house in the grounds and the salary is in accordance

with Burnham Scale Group 8.

Further particulars may be obtained from the

Secretary, Board of Management for Methodist

Residential Schools, 25 Marlborough Road, London,

NW1 5JP to whom applications must be sent by 15

January 1982.

TES10/10/81

BISHOP'S STORTFORD COLLEGE

Hertfordshire

Applications are invited for the post of

Head of the English Department.

The post will become vacant on 1 January 1983 following

the retirement of Miss Margaret James, B.A.

Kent College is a girls' school comprising 356 senior girls

at Pembury and 130 junior girls at Autmores. 200 of the

225 boarders are in the senior school. The Head lives in a

house in the grounds and the salary is in accordance

with Burnham Scale Group 8.

Further particulars may be obtained from the

Secretary, Board of Management for Methodist

Residential Schools, 25 Marlborough Road, London,

NW1 5JP to whom applications must be sent by 15

January 1982.

TES10/10/81

SECOND MASTER/

MISTRESS

Applications are invited for the above post which will

become vacant from 1st September, 1982 upon the

retirement of the present holder.

Applicants should be graduates with appropriate

teaching experience.

The post will be resident. Accommodation is

available. Salary by agreement according to

qualifications and experience.

Letters of application with full curriculum vitae

and the names of three referees should be sent to

The Headmaster, Bishop's Stortford College,

Bishop's Stortford, Herts. CM23 2QZ, before Friday,

4th December 1981.

TES10/10/81

MIDDLESEX

continued

English

Heads of Department

DEVON

EXETER SCHOOL

Head of Department Post. 600 on

Full time. Salary £12,000 p.a. plus

allowance. Applications to the

Headmaster, Exeter School, Exeter

EX1 1JH. Closing date 15.12.81.

25th November 1981. (24776)

184418

LONDON

KING'S COLLEGE SCHOOL

Applications are invited for the

Head of the English Department

at King's College School, Strand

London WC2R 2LS. Salary £12,000

p.a. plus allowance. Applications to

the Headmaster, King's College

School, Strand, London WC2R 2LS.

Closing date 15.12.81. (24776)

184418

PETERBOROUGH

KING'S COLLEGE SCHOOL

Applications are invited for the

Head of the English Department

at King's College School, Strand

London WC2R 2LS. Salary £12,000

p.a. plus allowance. Applications to

the Headmaster, King's College

School, Strand, London WC2R 2LS.

Closing date 15.12.81. (24776)

184418

Other Assistants

LONDON

LATYMER UPPER SCHOOL

Applications are invited for the

Head of the English Department

at Latymer Upper School, Uxbridge

Middlesex. Salary £12,000 p.a. plus

allowance. Applications to the

Headmaster, Latymer Upper School,

Uxbridge, Middlesex. Closing date

15.12.81. (24776) 184418

KENT COLLEGE, PEMBRUY

Tunbridge Wells

The Board of Management for Methodist Residential

Schools and the Governors of Kent College invite

applications from experienced graduates who wish to

work in a Christian foundation for the post of

Head of the English Department.

The post will become vacant on 1 January 1983 following

the retirement of Miss Margaret James, B.A.

Kent College is a girls' school comprising 356 senior girls

at Pembury and 130 junior girls at Autmores. 200 of the

225 boarders are in the senior school. The Head lives in a

house in the grounds and the salary is in accordance

with Burnham Scale Group 8.

Further particulars may be obtained from the

Secretary, Board of Management for Methodist

Residential Schools, 25 Marlborough Road, London,

NW1 5JP to whom applications must be sent by 15

January 1982.

TES10/10/81

BISHOP'S STORTFORD COLLEGE

Hertfordshire

Applications are invited for the post of

Head of the English Department.

The post will become vacant on 1 January 1983 following

the retirement of Miss Margaret James, B.A.

Kent College is a girls' school comprising 356 senior girls

at Pembury and 130 junior girls at Autmores. 200 of the

225 boarders are in the senior school. The Head lives in a

house in the grounds and the salary is in accordance

with Burnham Scale Group 8.

Further particulars may be obtained from the

Secretary, Board of Management for Methodist

Residential Schools, 25 Marlborough Road, London,

NW1 5JP to whom applications must be sent by 15

January 1982.

TES10/10/81

SECOND MASTER/

MISTRESS

Applications are invited for the above post which will

become vacant from 1st September, 1982 upon the

retirement of the present holder.

Applicants should be graduates with appropriate

teaching experience.

The post will be resident. Accommodation is

available. Salary by agreement according to

qualifications and experience.

Letters of application with full curriculum vitae

and the names of three referees should be sent to

The Headmaster, Bishop's Stortford College,

Bishop's Stortford, Herts. CM23 2QZ, before Friday,

4th December 1981.

TES10/10/81

Home Economics

continued

English

Heads of Department

DEVON

EXETER SCHOOL

Head of Department Post. 600 on

Full time. Salary £12,000 p.a. plus

allowance. Applications to the

Headmaster, Exeter School, Exeter

EX1 1JH. Closing date 15.12.81.

25th November 1981. (24776)

184418

LONDON

KING'S COLLEGE SCHOOL

Applications are invited for the

Head of the English Department

at King's College School, Strand

London WC2R 2LS. Salary £12,000

p.a. plus allowance. Applications to

the Headmaster, King's College

School, Strand, London WC2R 2LS.

Closing date 15.12.81. (24776)

184418

PETERBOROUGH

KING'S COLLEGE SCHOOL

Applications are invited for the

Head of the English Department

at King's College School, Strand

London WC2R 2LS. Salary £12,000

p.a. plus allowance. Applications to

the Headmaster, King's College

School, Strand, London WC2R 2LS.

Closing date 15.12.81. (24776)

184418

Other Assistants

LONDON

LATYMER UPPER SCHOOL

Applications are invited for the

Head of the English Department

at Latymer Upper School, Uxbridge

Middlesex. Salary £12,000 p.a. plus

allowance. Applications to the

Headmaster, Latymer Upper School,

Uxbridge, Middlesex. Closing date

15.12.81. (24776) 184418

KENT COLLEGE, PEMBRUY

Tunbridge Wells

The Board of Management for Methodist Residential

Schools and the Governors of Kent College invite

applications from experienced graduates who wish to

work in a Christian foundation for the post of

Head of the English Department.

The post will become vacant on 1 January 1983 following

the retirement of Miss Margaret James, B.A.

Kent College is a girls' school comprising 356 senior girls

at Pembury and 130 junior girls at Autmores. 200 of the

225 boarders are in the senior school. The Head lives in a

house in the grounds and the salary is in accordance

with Burnham Scale Group 8.

Further particulars may be obtained from the

Secretary, Board of Management for Methodist

Residential Schools, 25 Marlborough Road, London,

NW1 5JP to whom applications must be sent by 15

January 1982.

TES10/10/81

BISHOP'S STORTFORD COLLEGE

Hertfordshire

Applications are invited for the post of

Head of the English Department.

The post will become vacant on 1 January 1983 following

the retirement of Miss Margaret James, B.A.

Kent College is a girls' school comprising 356 senior girls

at Pembury and 130 junior girls at Autmores. 200 of the

225 boarders are in the senior school. The Head lives in a

house in the grounds and the salary is in accordance

with Burnham Scale Group 8.

Further particulars may be obtained from the

Secretary, Board of Management for Methodist

Residential Schools, 25 Marlborough Road, London,

NW1 5JP to whom applications must be sent by 15

January 1982.

TES10/10/81

SECOND MASTER/

MISTRESS

Applications are invited for the above post which will

become vacant from 1st September, 1982 upon the

retirement of the present holder.

Applicants should be graduates with appropriate

teaching experience.

The post will be resident. Accommodation is

available. Salary by agreement according to

qualifications and experience.

Letters of application with full curriculum vitae

and the names of three referees should be sent to

The Headmaster, Bishop's Stortford College,

Bishop's Stortford, Herts. CM23 2QZ, before Friday,

4th December 1981.

TES10/10/81

Home Economics

continued

English

Heads of Department

DEVON

EXETER SCHOOL

Head of Department Post. 600 on

Full time. Salary £12,000 p.a. plus

allowance. Applications to the

Headmaster, Exeter School, Exeter

EX1 1JH. Closing date 15.12.81.

25th November 1981. (24776)

184418

LONDON

KING'S COLLEGE SCHOOL

Applications are invited for the

Head of the English Department

at King's College School, Strand

London WC2R 2LS. Salary £12,000

p.a. plus allowance. Applications to

the Headmaster, King's College

DORSET

DORSET COLLEGE OF AGRICULTURE
Kingston Maurward, Dorchester

PRINCIPAL

(Points 8-12, £16,303-£16,836 on the Burnham Scale of Salaries for Principals of Agricultural and Horticultural Establishments).

Applications are invited for this post which becomes vacant on the retirement of the present holder on 31st August 1982.

Application forms (returnable by 23 November 1981) and further particulars available on receipt of stamped addressed envelope from: County Education Officer (HFEIC) County Hall Dorchester, Dorset DT1 1XJ.

TES22/00/18

Bedfordshire Education Service

BEDFORD COLLEGE OF HIGHER EDUCATION

HEAD OF SCHOOL OF SCIENCE AND MATHEMATICS (Grade V)

with effect from 1 April 1982

Application forms and further particulars available from: The Director, Bedford College of Higher Education, Cauldwell Street, Bedford, MK42 9AH. (Tel: 0234 45151)

Closing date: Friday, 4th December 1981.

TES22/00/18

NORTH NOTTINGHAMSHIRE COLLEGE OF FURTHER EDUCATION

Carlton Road, Workamp, Notts., S81 7HP
RE-ADVERTISEMENT

Appointment of Vice-Principal

Applications are invited for the above post which becomes vacant on 1st September 1981. Applicants should be graduates with experience of senior responsibility in Further Education.

The College is at present in Group V with the following departments: Building, Business and Management Studies, Community Studies, Engineering, General Studies and Science, Mining Engineering, Work Orientation. Further details and application forms are available from and returnable to the Director of Education, an Advanced Craft Certificate in Carpentry & Joinery, together with relevant industrial experience. Teaching experience and a machine woodworking qualification would be desirable.

Further details and application forms from The Principal, Barry College of Further Education, Colcol Road, Barry, South Glamorgan (Telephone 73328) to whom application forms should be returned within 14 days of this advertisement. Please enclose a.s.e.s.

TES22/00/18

Nottinghamshire County Council
County Hall West Bridgford
Nottingham NG2 7DP
Tel: 0533 7777, ext 594 or 861418. The closing date for receipt of applications is 1st December, 1981.

REDBRIDGE TECHNICAL COLLEGE
LITTLE HEATH, RIMFORD, ESSEX RM8 4XT.
TEL: 01-599 8231

Principal A. G. Hall, B.Sc. (Econ) D.P.A.,
F.C.I.S. Cert. Ed.

Requires as soon as possible;

SENIOR LECTURER IN BUSINESS STUDIES
SENIOR LECTURER IN SOCIAL SCIENCES
LECTURER II IN ELECTRONICS

Application forms and further particulars are available from the Principal at the above address.

TES22/00/18

COLLEGES OF FURTHER EDUCATION

KIRKLEES

METROPOLITAN COUNCIL
Huddersfield Technical College
Huddersfield, West Yorkshire

CONSTRUCTION
Applications are invited for the following posts:

LECTURER AND DEPUTY HEAD OF DEPARTMENT
The person appointed to the degree of degree equivalent holders with experience in construction crafts and technical education. Salary (Burnham Scale): Principal Lecturer £11,291 - £12,391 p.a.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

LINCOLNSHIRE

LINCOLN COLLEGE OF TECHNOLOGY
Cathedral Square, Lincoln, LNS 8HQ

HEAD OF DEPARTMENT OF COMMUNITY STUDIES: GRADE III.

Applications are invited for the above mentioned post which will be vacant from 1st May 1982. Following the appointment of the present post holder to a college Principalship.

The Department offers a wide range of courses in catering, nursing and related subjects. Candidates will be expected to have had substantial experience in one or more of these fields.

Applicants should be well qualified, preferably with degree or equivalent qualification, or in possession of relevant teaching qualification would be an added recommendation. Senior experience as a teacher in further education is essential.

Previous applications will be considered.

Application forms and further particulars are available from the Principal to whom they should be returned within two weeks of the appearance of this advertisement. (12/6/81)

250018

WEST SUSSEX
CHESTER COLLEGE OF TECHNOLOGY
Westfield, Chichester, West Sussex

HEAD OF DEPARTMENT MANUFACTURING AND BUSINESS STUDIES
Applications are invited for the above post which will be vacant from 1st January 1982. The successful candidate will be responsible for the overall management of the Department and will be expected to have had substantial experience in a similar post.

Applicants should be well qualified, preferably with degree or equivalent qualification, or in possession of relevant teaching qualification would be an added recommendation. Senior experience as a teacher in further education is essential.

Previous applications will be considered.

Application forms and further particulars are available from the Principal to whom they should be returned within two weeks of the appearance of this advertisement. (12/6/81)

250018

SOUTH GLAMORGAN COUNTY COUNCIL
BARRY COLLEGE OF FURTHER EDUCATION

Required w.e.f. 1st January, 1982, or as soon as possible thereafter:-

LECTURER GRADE 1 IN CARPENTRY AND JOINERY

Salary Scale (September 1st 1981) £5,034-£8,658.

The position in the range is determined by approved qualifications and experience.

The post will involve teaching full-time C.I.T.B. standard scheme and part-time day release students.

Applicants should possess a City & Guilds Full Technological Certificate in Building Crafts or an equivalent qualification, and with relevant industrial experience.

Teaching experience and a machine woodworking qualification would be desirable.

Further details and application forms from The Principal, Barry College of Further Education, Colcol Road, Barry, South Glamorgan (Telephone 73328) to whom application forms should be returned within 14 days of this advertisement. Please enclose a.s.e.s.

TES22/00/26

Waltham Forest College
Department of Health Education, Art and Fashion

Senior Lecturer - Art and Fashion
Re-advertisement

to be responsible for the direction of the College Art, Design and Fashion Centre from January 1982 or as soon as possible thereafter, following the retirement of the present post holder.

Applicants must be well qualified and have extensive teaching and administrative experience of Art and Fashion education in the Further Education sector.

Previous applications will be considered and need not be repeated. Salary - Senior Lecturer £10,122-£11,826 per annum (inclusive).

Application forms and further details available from the Personnel Staffing Officer, Waltham Forest College, Forest Road, London E7 8JB. Telephone No. 01-527 2311 Ext. 269

TES22/00/26

Waltham Forest

Senior Lecturer

to be responsible for the direction of the College Art, Design and Fashion Centre from January 1982 or as soon as possible thereafter, following the retirement of the present post holder.

Applicants must be well qualified and have extensive teaching and administrative experience of Art and Fashion education in the Further Education sector.

Previous applications will be considered and need not be repeated. Salary - Senior Lecturer £10,122-£11,826 per annum (inclusive).

Application forms and further details available from the Personnel Staffing Officer, Waltham Forest College, Forest Road, London E7 8JB. Telephone No. 01-527 2311 Ext. 269

TES22/00/26

Waltham Forest

Other Appointments

BASINGSTOKE

TECHNICAL COLLEGE
Warrington Road, Basingstoke, Hampshire RG24 0AP

Applications are invited for the following posts:

LECTURER IN CONSTRUCTION
The person appointed to the degree of degree equivalent holders with experience in construction crafts and technical education. Salary (Burnham Scale): Principal Lecturer £11,291 - £12,391 p.a.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

BERKSHIRE
READING COLLEGE OF TECHNOLOGY
Department of Business

LECTURER IN BUSINESS
Applications are invited for the following posts:

LECTURER IN BUSINESS
The person appointed to the degree of degree equivalent holders with experience in business studies. Salary (Burnham Scale): Principal Lecturer £11,291 - £12,391 p.a.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

BERKSHIRE
COUNTY COUNCIL
Reading College of Technology

LECTURER IN BUSINESS
Applications are invited for the following posts:

LECTURER IN BUSINESS
The person appointed to the degree of degree equivalent holders with experience in business studies. Salary (Burnham Scale): Principal Lecturer £11,291 - £12,391 p.a.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

CLEVELAND
LONGLANDS COLLEGE OF FURTHER EDUCATION

Applications are invited for the following posts:

LECTURER IN BUSINESS
The person appointed to the degree of degree equivalent holders with experience in business studies. Salary (Burnham Scale): Principal Lecturer £11,291 - £12,391 p.a.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

SOUTH GLAMORGAN COUNTY COUNCIL
BARRY COLLEGE OF FURTHER EDUCATION

Required w.e.f. 1st January, 1982, or as soon as possible thereafter:-

LECTURER GRADE 1 IN CARPENTRY AND JOINERY

Salary Scale (September 1st 1981) £5,034-£8,658.

The position in the range is determined by approved qualifications and experience.

The post will involve teaching full-time C.I.T.B. standard scheme and part-time day release students.

Applicants should possess a City & Guilds Full Technological Certificate in Building Crafts or an equivalent qualification, and with relevant industrial experience.

Teaching experience and a machine woodworking qualification would be desirable.

Further details and application forms from The Principal, Barry College of Further Education, Colcol Road, Barry, South Glamorgan (Telephone 73328) to whom application forms should be returned within 14 days of this advertisement. Please enclose a.s.e.s.

TES22/00/26

KINGSWAY-PRINCETON COLLEGE
Department of Arts and Languages

LECTURER II IN PHOTOGRAPHY

This multi-cultural college requires a multi-cultural lecturer in Photography to set its section leader and subject adviser of the Photographic Section of the Department.

The person appointed to the degree of degree equivalent holders with experience in photography. Salary (Burnham Scale): Principal Lecturer £11,291 - £12,391 p.a.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

PADDINGTON COLLEGE
Department of Engineering

LECTURER IN ELECTRONICS

The person appointed to the degree of degree equivalent holders with experience in electronics. Salary (Burnham Scale): Principal Lecturer £11,291 - £12,391 p.a.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

Waltham Forest College
Department of Health Education, Art and Fashion

Senior Lecturer - Art and Fashion
Re-advertisement

to be responsible for the direction of the College Art, Design and Fashion Centre from January 1982 or as soon as possible thereafter, following the retirement of the present post holder.

Applicants must be well qualified and have extensive teaching and administrative experience of Art and Fashion education in the Further Education sector.

ile colleges

Applications are invited for the following posts:

LECTURER IN CONSTRUCTION
The person appointed to the degree of degree equivalent holders with experience in construction crafts and technical education. Salary (Burnham Scale): Principal Lecturer £11,291 - £12,391 p.a.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

BRITTON COLLEGE
88 Britton Hill, SW2 1QS
General Education

LECTURER GRADE I
Required for January 1982 to teach Biology from non-examination level to OCE A level and general science in non-examination level. Applicants should be well qualified and have relevant experience in teaching.

Applicants should be well qualified, preferably with degree or equivalent qualification, or in possession of relevant teaching qualification would be an added recommendation. Senior experience as a teacher in further education is essential.

Previous applications will be considered.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

BERKSHIRE
COUNTY COUNCIL
Reading College of Technology

LECTURER IN BUSINESS
Applications are invited for the following posts:

LECTURER IN BUSINESS
The person appointed to the degree of degree equivalent holders with experience in business studies. Salary (Burnham Scale): Principal Lecturer £11,291 - £12,391 p.a.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

CITY & EAST LONDON COLLEGE
Pinfold Street, N1 6BX
Department of General Education

LECTURER GRADE I
Required for January 1982 to teach Biology from non-examination level to OCE A level and general science in non-examination level. Applicants should be well qualified and have relevant experience in teaching.

Applicants should be well qualified, preferably with degree or equivalent qualification, or in possession of relevant teaching qualification would be an added recommendation. Senior experience as a teacher in further education is essential.

Previous applications will be considered.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

LONGLANDS COLLEGE OF FURTHER EDUCATION

Applications are invited for the following posts:

LECTURER IN BUSINESS
The person appointed to the degree of degree equivalent holders with experience in business studies. Salary (Burnham Scale): Principal Lecturer £11,291 - £12,391 p.a.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

SOUTH GLAMORGAN COUNTY COUNCIL
BARRY COLLEGE OF FURTHER EDUCATION

Required w.e.f. 1st January, 1982, or as soon as possible thereafter:-

LECTURER GRADE 1 IN CARPENTRY AND JOINERY

Salary Scale (September 1st 1981) £5,034-£8,658.

The position in the range is determined by approved qualifications and experience.

The post will involve teaching full-time C.I.T.B. standard scheme and part-time day release students.

Applicants should possess a City & Guilds Full Technological Certificate in Building Crafts or an equivalent qualification, and with relevant industrial experience.

Teaching experience and a machine woodworking qualification would be desirable.

Further details and application forms from The Principal, Barry College of Further Education, Colcol Road, Barry, South Glamorgan (Telephone 73328) to whom application forms should be returned within 14 days of this advertisement. Please enclose a.s.e.s.

TES22/00/26

KINGSWAY-PRINCETON COLLEGE
Department of Arts and Languages

LECTURER II IN PHOTOGRAPHY

This multi-cultural college requires a multi-cultural lecturer in Photography to set its section leader and subject adviser of the Photographic Section of the Department.

The person appointed to the degree of degree equivalent holders with experience in photography. Salary (Burnham Scale): Principal Lecturer £11,291 - £12,391 p.a.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

PADDINGTON COLLEGE
Department of Engineering

LECTURER IN ELECTRONICS

The person appointed to the degree of degree equivalent holders with experience in electronics. Salary (Burnham Scale): Principal Lecturer £11,291 - £12,391 p.a.

ile colleges

Applications are invited for the following posts:

LECTURER IN CONSTRUCTION
The person appointed to the degree of degree equivalent holders with experience in construction crafts and technical education. Salary (Burnham Scale): Principal Lecturer £11,291 - £12,391 p.a.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

BRITTON COLLEGE
88 Britton Hill, SW2 1QS
General Education

LECTURER GRADE I
Required for January 1982 to teach Biology from non-examination level to OCE A level and general science in non-examination level. Applicants should be well qualified and have relevant experience in teaching.

Applicants should be well qualified, preferably with degree or equivalent qualification, or in possession of relevant teaching qualification would be an added recommendation. Senior experience as a teacher in further education is essential.

Previous applications will be considered.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

BERKSHIRE
COUNTY COUNCIL
Reading College of Technology

LECTURER IN BUSINESS
Applications are invited for the following posts:

LECTURER IN BUSINESS
The person appointed to the degree of degree equivalent holders with experience in business studies. Salary (Burnham Scale): Principal Lecturer £11,291 - £12,391 p.a.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

CITY & EAST LONDON COLLEGE
Pinfold Street, N1 6BX
Department of General Education

LECTURER GRADE I
Required for January 1982 to teach Biology from non-examination level to OCE A level and general science in non-examination level. Applicants should be well qualified and have relevant experience in teaching.

Applicants should be well qualified, preferably with degree or equivalent qualification, or in possession of relevant teaching qualification would be an added recommendation. Senior experience as a teacher in further education is essential.

Previous applications will be considered.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

LONGLANDS COLLEGE OF FURTHER EDUCATION

Applications are invited for the following posts:

LECTURER IN BUSINESS
The person appointed to the degree of degree equivalent holders with experience in business studies. Salary (Burnham Scale): Principal Lecturer £11,291 - £12,391 p.a.

Application forms and further particulars are available from the Principal in whom applications should be returned within fourteen days of the appearance of this advertisement. Please quote Ref: HTC 889. (14/6/81)

250018

THE ROCKEFELLER FOUNDATION ANNOUNCES Two International Programmes

at the BELLARIO STUDY & CONFERENCE CENTRE
Bellario (Como), Italy

International Conferences - small conferences or working groups focusing on topics or problems of international significance.

Scholars in Residence - an opportunity for scholars to work for approximately four weeks on individual projects. The Foundation provides the facilities of the Centre, located about 40 miles north of Milan, on a competitive basis to residents and conference organizers. It normally does not pay for related costs, such as transportation, of the participants in these two programmes.

For more information write:-

Ms Susan E. Garfield, Coordinator
Bellario Study and Conference Center
The Rockefeller Foundation
1133 Avenue of the Americas
New York, NEW YORK 10036

ENGLISH LANGUAGE TEACHERS FOR SAUDI ARABIA

Umm Al-Qura University is seeking muslim applicants (males & females) for full-time teaching positions as:

1. Full Professor
2. Associate Professor
3. Assistant Professor

QUALIFICATIONS
(a) Ph.D. in Applied Linguistics or TESOL and teaching experience.
(b) MA in Applied Linguistics or TESOL and teaching experience.

- DUTIES**
1. To teach English Phonology & Syntax.
 2. EFL Reading and Writing.
 3. Language Testing.

1. Attractive salaries depending on qualifications and experience.
2. Housing Allowances.
3. Return ticket to and from Saudi Arabia.
Send urgently a letter of application, 3 letters of recommendation, resume and credentials (including transcript to Saudi Educational Office, 29 Belgrave Square, London S.W.1. Ref: S/S NIAUM. TES48/00/00

ADMINISTRATION L.E.A.

continued

HILLINODON LONDON BOROUGH OF HILLINODON

CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

Attached to Hillinodon District Careers Office but must be available to travel throughout the Borough.

Applicants must be qualified but inexperienced candidates will be considered and appointment made to £1635 - £6914 p.a. inclusive for those serving their probationary year.

Frings benefits MAY include 75% removal expenses, loan fees to house purchase (max. £800) and temporary lodging allowance.

Applicants forms and further particulars available from the Personnel Officer, Hillinodon District Council, Hillinodon, London Borough of Hillinodon, London W14 8JG. Tel: 01-733 2253. Closing date 17 November 1981. Applications from disabled persons welcomed (14544)

SEFTON
METROPOLITAN BOROUGH OF SEFTON
EDUCATION COMMITTEE
CAREERS SERVICE

SPECIALIST CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Sefton Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Sefton Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Sefton Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further particulars available from the Personnel Officer, Sefton Metropolitan Borough Council, Sefton, Merseyside L35 9AD. (a.s.e. please).

Closing date 16th November 1981. (14544)

TRAFFORD
METROPOLITAN BOROUGH OF TRAFFORD
EDUCATION DEPARTMENT

SPECIALIST ADVISER

AP4 2394, P.1, £1760 p.a.

Applicants are invited from teachers and other suitably qualified persons who have a contribution to make to the development of the Education Department in primary, secondary and special schools and in further education colleges.

Applicants forms and further particulars available from the Personnel Officer, Trafford Metropolitan Borough Council, Trafford, Greater Manchester M17 1JG. Tel: 01-617 3253. Closing date 17th November 1981. (14544)

LANCASHIRE
COUNTY COUNCIL
CAREERS SERVICE

Appointment of Temporary Careers Officer

AP4 2394, P.1, £1760 p.a.

The Lancashire Careers Service is looking for trained and qualified careers officers or students about to complete their professional training to replace members of staff promoted to specialist graded posts.

The successful applicants will be expected to undertake the full range of professional work with pupils and students with employers and with unemployed young people as members of the District teams based at South Ribbles (Preston) and Poulton (Poulton & Colne).

Applicants forms and further details are available from the Chief Education Officer, P.O. Box 1, County Hall, Preston, Lancashire PR1 1XJ. Tel: 01-773 48000. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

Applicants forms and further details are available from the Personnel Officer, Leicestershire County Council, Leicestershire, Leicestershire LE1 1XJ. Tel: 01-533 871313 ext 3261. Closing date 17th November 1981. (14544)

LEICESTERSHIRE
CAREERS OFFICER

AP4 2394, P.1, £1760 p.a.

40% of time working in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project and 40% in Leicestershire Unit on careers information research relating to the Careers Advisory Service Computer Aid project.

LANCASHIRE COUNTY COUNCIL CAREERS SERVICE

Appointment of Temporary Careers Officer

AP4 2394, P.1, £1760 p.a.

The Lancashire Careers Service is looking for trained and qualified careers officers or students about to complete their professional training to replace members of staff promoted to specialist graded posts.

The successful applicants will be expected to undertake the full range of professional work with pupils and students with employers and with unemployed young people as members of the District teams based at South Ribbles (Preston) and Poulton (Poulton & Colne).

Applicants forms and further details are available from the Personnel Officer, Lancashire County Council, Lancashire, Lancashire LA1 1XJ. Tel: 01-773 48000. Closing date 17th November 1981. (14544)

LANCASHIRE
COUNTY COUNCIL
CAREERS SERVICE

Appointment of Temporary Careers Officer

AP4 2394, P.1, £1760 p.a.

The Lancashire Careers Service is looking for trained and qualified careers officers or students about to complete their professional training to replace members of staff promoted to specialist graded posts.

The successful applicants will be expected to undertake the full range of professional work with pupils and students with employers and with unemployed young people as members of the District teams based at South Ribbles (Preston) and Poulton (Poulton & Colne).

Applicants forms and further details are available from the Personnel Officer, Lancashire County Council, Lancashire, Lancashire LA1 1XJ. Tel: 01-773 48000. Closing date 17th November 1981. (14544)

LANCASHIRE
COUNTY COUNCIL
CAREERS SERVICE

Appointment of Temporary Careers Officer

AP4 2394, P.1, £1760 p.a.

The Lancashire Careers Service is looking for trained and qualified careers officers or students about to complete their professional training to replace members of staff promoted to specialist graded posts.

The successful applicants will be expected to undertake the full range of professional work with pupils and students with employers and with unemployed young people as members of the District teams based at South Ribbles (Preston) and Poulton (Poulton & Colne).

Applicants forms and further details are available from the Personnel Officer, Lancashire County Council, Lancashire, Lancashire LA1 1XJ. Tel: 01-773 48000. Closing date 17th November 1981. (14544)

LANCASHIRE
COUNTY COUNCIL
CAREERS SERVICE

Appointment of Temporary Careers Officer

AP4 2394, P.1, £1760 p.a.

The Lancashire Careers Service is looking for trained and qualified careers officers or students about to complete their professional training to replace members of staff promoted to specialist graded posts.

The successful applicants will be expected to undertake the full range of professional work with pupils and students with employers and with unemployed young people as members of the District teams based at South Ribbles (Preston) and Poulton (Poulton & Colne).

Applicants forms and further details are available from the Personnel Officer, Lancashire County Council, Lancashire, Lancashire LA1 1XJ. Tel: 01-773 48000. Closing date 17th November 1981. (14544)

LANCASHIRE
COUNTY COUNCIL
CAREERS SERVICE

Appointment of Temporary Careers Officer

AP4 2394, P.1, £1760 p.a.

The Lancashire Careers Service is looking for trained and qualified careers officers or students about to complete their professional training to replace members of staff promoted to specialist graded posts.

The successful applicants will be expected to undertake the full range of professional work with pupils and students with employers and with unemployed young people as members of the District teams based at South Ribbles (Preston) and Poulton (Poulton & Colne).

Applicants forms and further details are available from the Personnel Officer, Lancashire County Council, Lancashire, Lancashire LA1 1XJ. Tel: 01-773 48000. Closing date 17th November 1981. (14544)

LANCASHIRE
COUNTY COUNCIL
CAREERS SERVICE

Appointment of Temporary Careers Officer

AP4 2394, P.1, £1760 p.a.

The Lancashire Careers Service is looking for trained and qualified careers officers or students about to complete their professional training to replace members of staff promoted to specialist graded posts.

The successful applicants will be expected to undertake the full range of professional work with pupils and students with employers and with unemployed young people as members of the District teams based at South Ribbles (Preston) and Poulton (Poulton & Colne).

Applicants forms and further details are available from the Personnel Officer, Lancashire County Council, Lancashire, Lancashire LA1 1XJ. Tel: 01-773 48000. Closing date 17th November 1981. (14544)

LANCASHIRE
COUNTY COUNCIL
CAREERS SERVICE

Appointment of Temporary Careers Officer

AP4 2394, P.1, £1760 p.a.

The Lancashire Careers Service is looking for trained and qualified careers officers or students about to complete their professional training to replace members of staff promoted to specialist graded posts.

The successful applicants will be expected to undertake the full range of professional work with pupils and students with employers and with unemployed young people as members of the District teams based at South Ribbles (Preston) and Poulton (Poulton & Colne).

Applicants forms and further details are available from the Personnel Officer, Lancashire County Council, Lancashire, Lancashire LA1 1XJ. Tel: 01-773 48000. Closing date 17th November 1981. (14544)

LANCASHIRE
COUNTY COUNCIL
CAREERS SERVICE

Appointment of Temporary Careers Officer

AP4 2394, P.1, £1760 p.a.

The Lancashire Careers Service is looking for trained and qualified careers officers or students about to complete their professional training to replace members of staff promoted to specialist graded posts.

The successful applicants will be expected to undertake the full range of professional work with pupils and students with employers and with unemployed young people as members of the District teams based at South Ribbles (Preston) and Poulton (Poulton & Colne).

Applicants forms and further details are available from the Personnel Officer, Lancashire County Council, Lancashire, Lancashire LA1 1XJ. Tel: 01-773 48000. Closing date 17th November 1981. (14544)

LANCASHIRE
COUNTY COUNCIL
CAREERS SERVICE

Appointment of Temporary Careers Officer

AP4 2394, P.1, £1760 p.a.

The Lancashire Careers Service is looking for trained and qualified careers officers or students about to complete their professional training to replace members of staff promoted to specialist graded posts.

The successful applicants will be expected to undertake the full range of professional work with pupils and students with employers and with unemployed young people as members of the District teams based at South Ribbles (Preston) and Poulton (Poulton & Colne).

Applicants forms and further details are available from the Personnel Officer, Lancashire County Council, Lancashire, Lancashire LA1 1XJ. Tel: 01-773 48000. Closing date 17th November 1981. (14544)

